

Supplementary information for

Near infrared spectroscopy of micro-solvated protonated methanol

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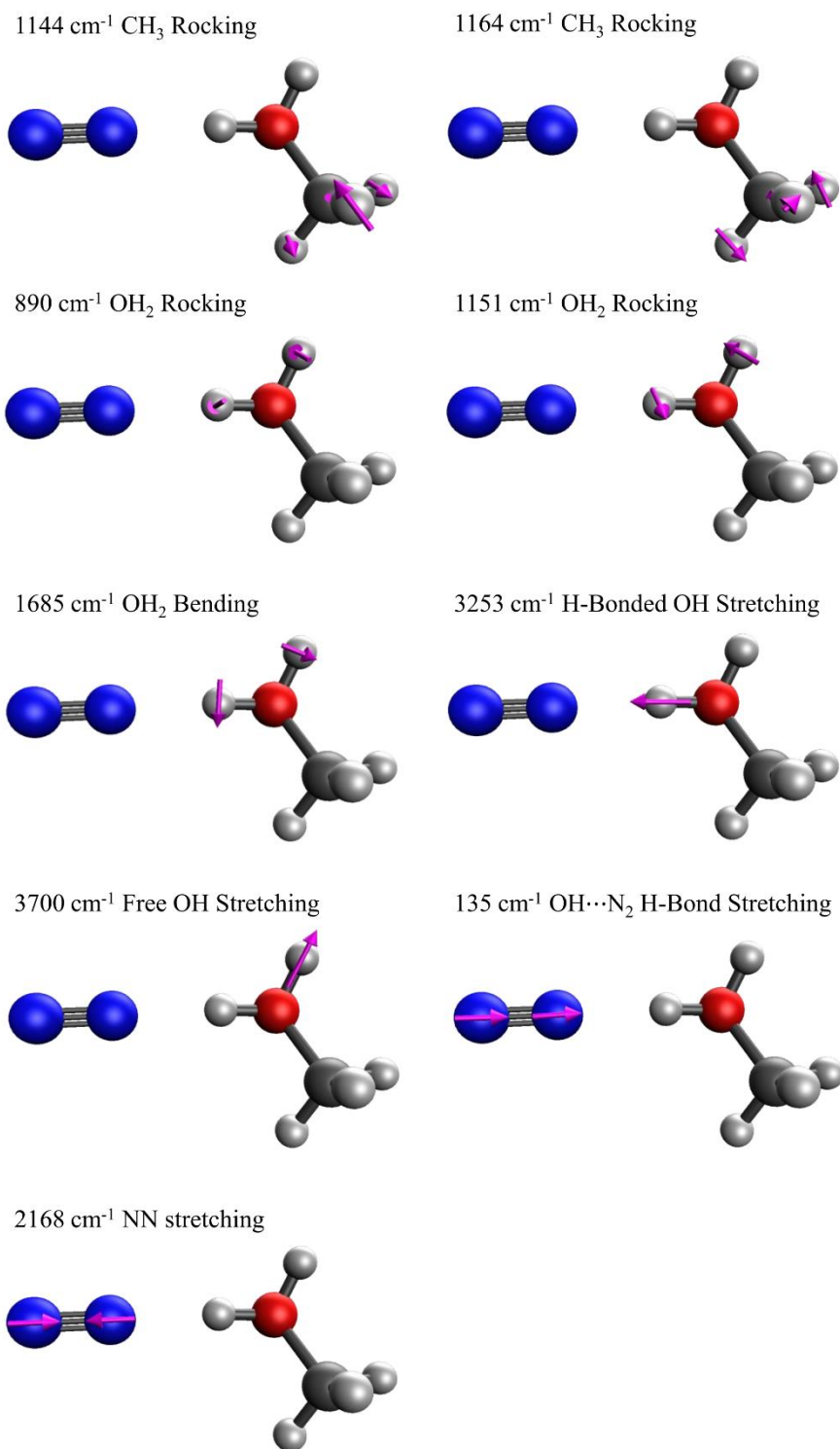


Figure S1. Selected Localized Normal Modes of $\text{MeOH}_2^+\cdots\text{N}_2$ Used in DVR-FBR Calculations.

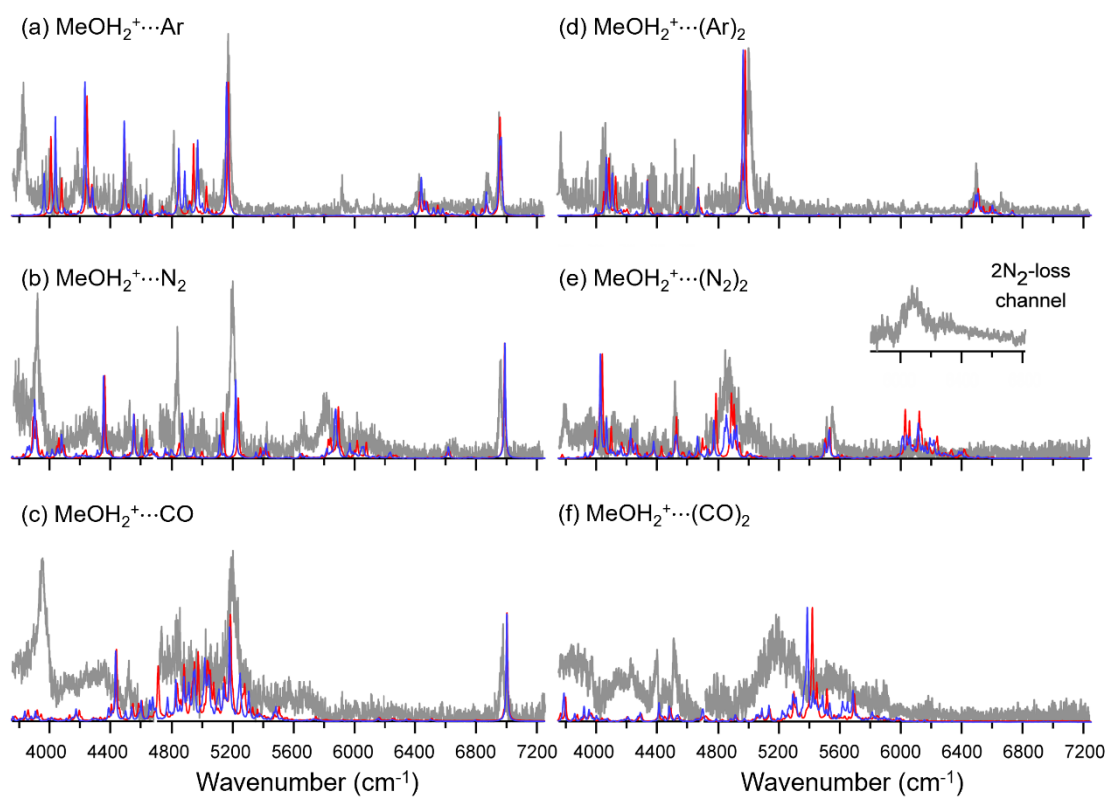


Figure S2. Convergence Test for the DVR–FBR Calculation.

The experimental spectrum is shown in gray, and the DVR–FBR simulations with $Q_{\max} = 7$ (red) and $Q_{\max} = 8$ (blue) overlap closely, indicating the convergence of Q_{\max} .

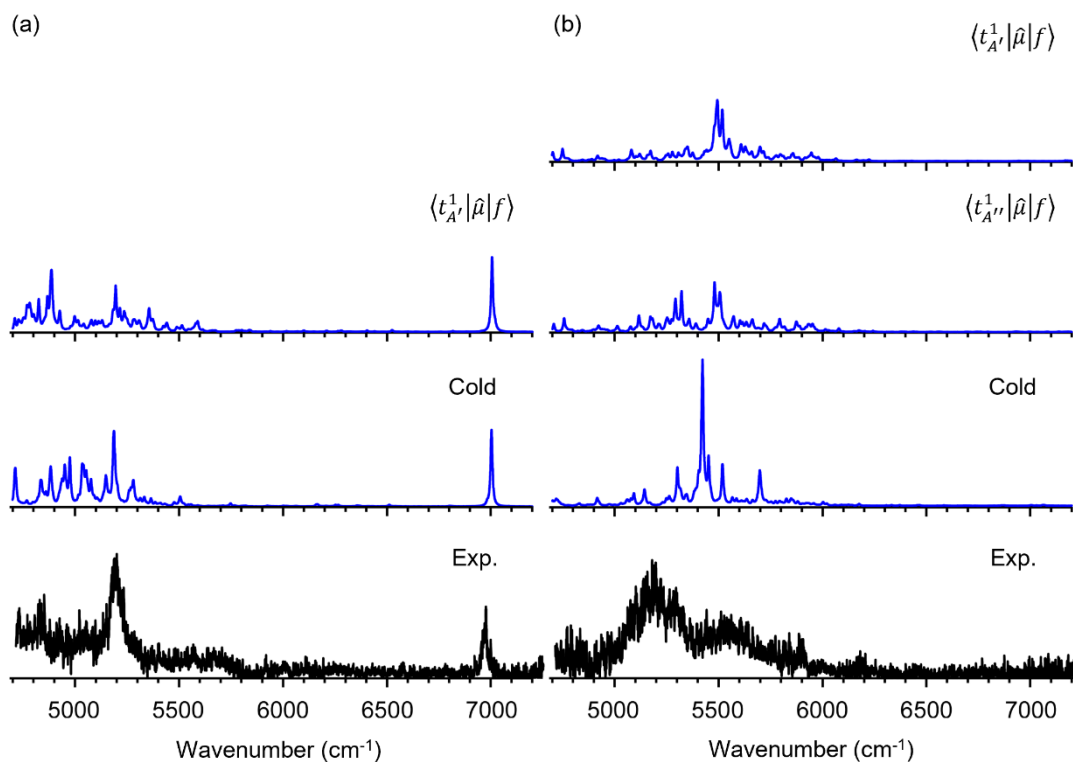


Figure S3. Hot Band Simulation of (a) MeOH₂⁺...CO, (b) MeOH₂⁺...(CO)₂, in the NIR Region.

The bottom black curves are the experimentally observed NIR spectra, and the blue curves right above the observed spectra are the calculated "cold" spectra, which are identical to the simulated spectra used in **Figures 1** and **2** of the main text. The remaining blue curves above the cold spectra are the "hot band" spectra reproduced by initiating transitions from the first excited level of the H-bond stretching modes, $|t_{A'}^1\rangle$ and/or $|t_{A''}^1\rangle$. In the case of MeOH₂⁺...CO (**Figure S1a**), hot bands did not significantly deform the general profile of the spectrum; while the $\langle t_{A'}^1 | \mu | f \rangle$ and $\langle t_{A''}^1 | \mu | f \rangle$ transitions for MeOH₂⁺...CO₂ in **Figure S1b** introduced additional bands around 5300 and 5500 cm⁻¹.

Table S1. Cartesian Coordinates of $\text{MeOH}_2^+\cdots\text{X}_n$ ($\text{X} = \text{Ar}, \text{N}_2, \text{and CO}; n = 1 \text{ and } 2$)

Optimized at MP2/aug-cc-pVDZ.

$\text{MeOH}_2^+\cdots\text{Ar}$

C	2.142147	-0.570573	0.025803
H	1.790537	-1.213800	-0.785676
H	1.973739	-0.993493	1.021302
H	3.168536	-0.229835	-0.135683
O	1.300491	0.688638	-0.109109
H	0.333773	0.507248	-0.033475
H	1.541872	1.379557	0.540533
Ar	-1.781404	-0.085297	0.006170

$\text{MeOH}_2^+\cdots\text{Ar}_2$

C	-0.978312	1.891295	0.000000
H	-0.849498	2.489746	0.906090
H	-1.898448	1.297990	0.000000
H	-0.849498	2.489746	-0.906090
O	0.204857	0.945147	0.000000
H	0.226806	0.372705	0.801232
H	0.226806	0.372705	-0.801232
Ar	0.204857	-0.720329	2.727321
Ar	0.204857	-0.720329	-2.727321

MeOH₂⁺...N₂

C	2.022606	-0.569685	0.026212
H	1.669109	-1.242981	-0.759693
H	1.896730	-0.979105	1.033756
H	3.037262	-0.212855	-0.171053
O	1.147405	0.657064	-0.110458
H	0.174846	0.451218	-0.013949
H	1.391649	1.365814	0.516686
N	-1.553436	0.030494	0.016386
N	-2.658632	-0.204851	0.000850

MeOH₂⁺...(N₂)₂

C	-0.667982	1.975954	-0.000000
H	-0.432051	2.544693	0.903791
H	-1.689823	1.581882	-0.000000
H	-0.432051	2.544693	-0.903791
O	0.298968	0.825287	-0.000000
H	0.215361	0.262464	0.814117
H	0.215361	0.262464	-0.814117
N	0.133548	-0.636482	-2.391504
N	0.133548	-0.636482	2.391504
N	0.133548	-1.195962	3.373486
N	0.133548	-1.195962	-3.373486

MeOH₂⁺...CO

C	2.069077	-0.564008	0.026554
H	1.720539	-1.244450	-0.755550
H	1.951909	-0.976187	1.034240
H	3.083512	-0.208047	-0.173966
O	1.189367	0.651219	-0.109553
H	0.197279	0.437211	-0.016781
H	1.432879	1.358817	0.518213
C	-1.526116	0.045422	0.012599
O	-2.644852	-0.183198	0.004419

MeOH₂⁺...(CO)₂

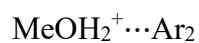
C	-0.677845	2.007044	-0.000000
H	-0.450811	2.582803	0.901899
H	-1.700829	1.614922	-0.000000
H	-0.450811	2.582803	-0.901899
O	0.288447	0.868148	-0.000000
H	0.207819	0.302199	0.827894
H	0.207819	0.302199	-0.827894
C	0.140940	-0.614947	2.414226
O	0.140940	-1.187063	3.403549
C	0.140940	-0.614947	-2.414226
O	0.140940	-1.187063	-3.403549

Table S2. Selected Localized Normal Modes Frequencies and Intensities of MeOH₂⁺⋯X_n (X = Ar, N₂, and CO; n = 1 and 2) Evaluated at MP2/aug-cc-pVDZ.

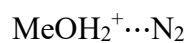
The following tables list the frequencies and intensities of the selected localized normal modes used in this research. The CH₃ stretching/bending, despite not being included in the analysis, are also listed here in gray text.

MeOH₂⁺⋯Ar

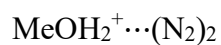
Freq. (cm ⁻¹)	Intensity (km/mol)	Assignment
1143	1.16	CH ₃ Rocking
1163	0.36	CH ₃ Rocking
1451	1.12	CH ₃ Umbrella Bending
1477	17.20	CH ₃ Anti-symmetric Bending
1479	15.45	CH ₃ Anti-symmetric Bending
3131	0.43	CH ₃ Symmetric Stretching
3276	3.25	CH ₃ Anti-symmetric Stretching
3282	5.27	CH ₃ Anti-symmetric Stretching
816	192.22	OH ₂ Rocking
1092	3.10	OH ₂ Rocking
1666	67.79	OH ₂ Bending
3502	717.07	Hydrogen-Bonded OH Stretching
3694	352.24	Free OH Stretching
75	0.95	OH⋯Ar Hydrogen-Bond Stretching



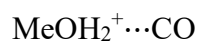
Freq. (cm ⁻¹)	Intensity (km/mol)	Assignment
1144	1.17	CH ₃ Rocking
1163	0.13	CH ₃ Rocking
1451	0.71	CH ₃ Umbrella Bending
1478	18.16	CH ₃ Anti-symmetric Bending
1480	14.98	CH ₃ Anti-symmetric Bending
3129	0.46	CH ₃ Symmetric Stretching
3272	2.34	CH ₃ Anti-symmetric Stretching
3279	4.06	CH ₃ Anti-symmetric Stretching
848	153.16	OH ₂ Rocking
1122	1.31	OH ₂ Rocking
1665	40.60	OH ₂ Bending
3502	468.76	OH ₂ Symmetric Stretching
3576	1092.10	OH ₂ Anti-symmetric Stretching
72	1.31	OH \cdots Ar Hydrogen-Bond Stretching
74	0.48	OH \cdots Ar Hydrogen-Bond Stretching



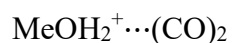
Freq. (cm ⁻¹)	Intensity (km/mol)	Assignment
1144	1.10	CH ₃ Rocking
1164	0.26	CH ₃ Rocking
1452	1.33	CH ₃ Umbrella Bending
1479	16.54	CH ₃ Anti-symmetric Bending
1481	14.91	CH ₃ Anti-symmetric Bending
3130	0.57	CH ₃ Symmetric Stretching
3272	2.16	CH ₃ Anti-symmetric Stretching
3279	3.93	CH ₃ Anti-symmetric Stretching
890	183.37	OH ₂ Rocking
1151	3.04	OH ₂ Rocking
1685	62.58	OH ₂ Bending
3253	1388.24	Hydrogen-Bonded OH Stretching
3700	279.68	Free OH Stretching
135	3.34	OH \cdots N ₂ Hydrogen-Bond Stretching
2168	18.78	NN stretching



Freq. (cm ⁻¹)	Intensity (km/mol)	Assignment
1146	1.13	CH ₃ Rocking
1164	0.02	CH ₃ Rocking
1453	0.98	CH ₃ Umbrella Bending
1482	16.97	CH ₃ Anti-symmetric Bending
1484	13.98	CH ₃ Anti-symmetric Bending
3127	0.94	CH ₃ Symmetric Stretching
3264	0.92	CH ₃ Anti-symmetric Stretching
3273	2.08	CH ₃ Anti-symmetric Stretching
949	159.75	OH ₂ Rocking
1218	0.00	OH ₂ Rocking
1693	35.32	OH ₂ Bending
3332	759.33	OH ₂ Symmetric Stretching
3373	1780.91	OH ₂ Anti-symmetric Stretching
123	4.22	OH \cdots N ₂ Hydrogen-Bond Stretching
130	1.69	OH \cdots N ₂ Hydrogen-Bond Stretching
2167	24.18	NN stretching
2167	8.23	NN stretching



Freq. (cm ⁻¹)	Intensity (km/mol)	Assignment
1145	0.99	CH ₃ Rocking
1164	0.21	CH ₃ Rocking
1452	1.60	CH ₃ Umbrella Bending
1481	16.05	CH ₃ Anti-symmetric Bending
1483	14.34	CH ₃ Anti-symmetric Bending
3128	0.80	CH ₃ Symmetric Stretching
3267	1.36	CH ₃ Anti-symmetric Stretching
3275	2.92	CH ₃ Anti-symmetric Stretching
955	138.20	OH ₂ Rocking
1193	3.95	OH ₂ Rocking
1687	38.02	OH ₂ Bending
2859	2109.46	Hydrogen-Bonded OH Stretching
3705	245.02	Free OH Stretching
159	3.40	OH \cdots CO Hydrogen-Bond Stretching
2137	0.99	CO stretching



Freq. (cm ⁻¹)	Intensity (km/mol)	Assignment
1147	1.05	CH ₃ Rocking
1163	0.02	CH ₃ Rocking
1453	0.97	CH ₃ Umbrella Bending
1484	16.76	CH ₃ Anti-symmetric Bending
1487	12.57	CH ₃ Anti-symmetric Bending
3124	1.64	CH ₃ Symmetric Stretching
3257	0.26	CH ₃ Anti-symmetric Stretching
3267	1.00	CH ₃ Anti-symmetric Stretching
1018	113.13	OH ₂ Rocking
1280	1.49	OH ₂ Rocking
1694	11.84	OH ₂ Bending
3086	1000.33	OH ₂ Symmetric Stretching
3090	2504.21	OH ₂ Anti-symmetric Stretching
143	2.87	OH \cdots CO Hydrogen-Bond Stretching
143	2.87	OH \cdots CO Hydrogen-Bond Stretching
2128	2.74	CO stretching
2128	2.74	CO stretching

Table S3. Assignment and Projection of the Pronounced Peaks

Here we listed all of the calculated transitions in the region of 4000 cm^{-1} - 7000 cm^{-1} whose IR intensity is larger than 0.05 km/mol . The *transition energy* (ω , in cm^{-1}), the *IR intensity* (I , in km/mol), and the *components of the transition dipole* (μ_x , μ_y and μ_z , in D) are listed in the following tables. In order to make reasonable assignments for these transitions, for each eigenstate ψ_a , we also listed a few of large components whose contribution exceeds 5%; in some cases that all projection are less than 5%, then only the largest one will be shown here.

To analyze the actual source of the transitions, we can decompose the transition dipole moment $\mu^{g \rightarrow f}$ between ground state $\langle g|$ and final state $|f\rangle$ into contribution from its components:

$$\mu^{g \rightarrow f} = \langle g| \hat{\mu} |f\rangle = \sum_i c_n \langle g| \hat{\mu} |n\rangle = \sum_i \mu^{g \rightarrow n}$$

in which $\mu^{g \rightarrow n}$ represents the contribution of FBR basis function $|n\rangle$ to the total transition dipole moment $\mu^{g \rightarrow f}$. For each eigenstate, we also listed the *contribution of the FBR components to the total transition moment*, ($\mu_x^{g \rightarrow n}$, $\mu_y^{g \rightarrow n}$ and $\mu_z^{g \rightarrow n}$), in D); we list the first three with largest norm of its transition dipole components (though some of them have small $|c_n|^2$).

The finite-basis representation (FBR) employed in this work is constructed as a direct product of eigenfunctions of one-dimensional single-mode DVR Hamiltonians, $|n\rangle = \prod_i \phi_{n_i}(q_i)$, where n_i denotes the vibrational quantum number of mode i . For the purpose of spectral assignment and presentation in the assignment tables, certain groups of vibrational modes were collectively treated in the assignment tables. In particular, the four CH_3/OH_2 rocking modes (R) exhibit similar frequencies and play a secondary role in the spectral interpretation presented here; to simplify the assignment tables, the individual quantum numbers of these rocking modes were combined into a single total quanta of rocking modes. For example, basis states $|R_{\text{CH}_3}^0, R_{\text{CH}_3}^0, R_{\text{OH}_2}^3, R_{\text{OH}_2}^1, \dots\rangle$ and $|R_{\text{CH}_3}^2, R_{\text{CH}_3}^1, R_{\text{OH}_2}^1, R_{\text{OH}_2}^0, \dots\rangle$ within the rocking-mode subspace are treated as $|R^4, \dots\rangle$; correspondingly, the squared projection coefficients $|c_n|^2$ and the contributions to the transition dipole moment, $\mu^{g \rightarrow n}$, of all basis functions sharing the same total rocking-mode quanta were summed when constructing the assignment tables. Analogous grouping procedures were applied to the H-bond stretching modes (t) and the $\text{N}\equiv\text{N}$ or $\text{C}\equiv\text{O}$ stretching modes (s_X). This grouping is applied only for clarity in data presentation and does not affect the vibrational eigenstates or transition intensities.

ω	I	μ_x	μ_y	μ_z	Assignment	$ c_n ^2$	$\mu_x^{g \rightarrow n}$	$\mu_y^{g \rightarrow n}$	$\mu_z^{g \rightarrow n}$
4008.9	1.522	-0.010	0.003	-0.006	$\langle 282 R^1, b^0, s_{\text{HB}}^1, s_{\text{free}}^0, t^0 \rangle$	45.64%	-0.007	-0.015	0.023
					$\langle 282 R^1, b^2, s_{\text{HB}}^0, s_{\text{free}}^0, t^0 \rangle$	7.00%	0.000	0.000	0.000
					$\langle 282 R^3, b^1, s_{\text{HB}}^0, s_{\text{free}}^0, t^0 \rangle$	6.64%	0.000	0.002	-0.004
					$\langle 282 R^1, b^0, s_{\text{HB}}^0, s_{\text{free}}^0, t^0 \rangle$	0.52%	-0.002	0.015	-0.020
					$\langle 282 R^0, b^0, s_{\text{HB}}^1, s_{\text{free}}^0, t^0 \rangle$	0.20%	0.014	0.000	-0.002
4013.2	0.099	0.003	-0.001	0.001	$\langle 283 R^4, b^0, s_{\text{HB}}^0, s_{\text{free}}^0, t^0 \rangle$	40.16%	0.000	0.000	0.000
					$\langle 283 R^2, b^1, s_{\text{HB}}^0, s_{\text{free}}^0, t^0 \rangle$	11.79%	0.000	0.000	0.000
					$\langle 283 R^1, b^0, s_{\text{HB}}^1, s_{\text{free}}^0, t^0 \rangle$	2.58%	0.002	0.004	-0.005
					$\langle 283 R^1, b^0, s_{\text{HB}}^0, s_{\text{free}}^0, t^0 \rangle$	0.03%	0.001	-0.004	0.005
					$\langle 283 R^0, b^0, s_{\text{HB}}^1, s_{\text{free}}^0, t^0 \rangle$	0.01%	-0.004	0.000	0.000
4020.8	0.103	0.003	-0.000	0.001	$\langle 284 R^3, b^1, s_{\text{HB}}^0, s_{\text{free}}^0, t^0 \rangle$	31.64%	0.000	0.000	0.000
					$\langle 284 R^1, b^2, s_{\text{HB}}^0, s_{\text{free}}^0, t^0 \rangle$	12.67%	0.000	0.000	0.000
					$\langle 284 R^4, b^0, s_{\text{HB}}^0, s_{\text{free}}^0, t^0 \rangle$	5.59%	0.000	0.000	0.000
					$\langle 284 R^1, b^0, s_{\text{HB}}^1, s_{\text{free}}^0, t^0 \rangle$	1.37%	0.001	0.003	-0.004
					$\langle 284 R^0, b^0, s_{\text{HB}}^1, s_{\text{free}}^0, t^0 \rangle$	0.01%	-0.004	0.000	0.000
					$\langle 284 R^1, b^0, s_{\text{HB}}^0, s_{\text{free}}^0, t^0 \rangle$	0.01%	0.000	-0.002	0.003
4079.6	0.746	0.008	0.000	0.003	$\langle 298 R^1, b^2, s_{\text{HB}}^0, s_{\text{free}}^0, t^0 \rangle$	27.87%	-0.001	-0.001	0.004
					$\langle 298 R^1, b^0, s_{\text{HB}}^1, s_{\text{free}}^0, t^0 \rangle$	14.87%	0.004	0.009	-0.013
					$\langle 298 R^3, b^1, s_{\text{HB}}^0, s_{\text{free}}^0, t^0 \rangle$	10.04%	0.000	0.003	-0.005
					$\langle 298 R^1, b^0, s_{\text{HB}}^0, s_{\text{free}}^1, t^0 \rangle$	5.35%	0.003	-0.002	0.008
					$\langle 298 R^3, b^0, s_{\text{HB}}^0, s_{\text{free}}^0, t^0 \rangle$	3.29%	0.001	-0.006	0.008
4139.4	0.090	-0.002	0.001	-0.002	$\langle 311 R^1, b^0, s_{\text{HB}}^1, s_{\text{free}}^0, t^1 \rangle$	52.01%	-0.006	-0.001	0.000
					$\langle 311 R^1, b^0, s_{\text{HB}}^1, s_{\text{free}}^0, t^2 \rangle$	7.11%	0.000	0.000	0.000
					$\langle 311 R^1, b^0, s_{\text{HB}}^1, s_{\text{free}}^0, t^0 \rangle$	4.01%	-0.002	-0.005	0.007
					$\langle 311 R^1, b^0, s_{\text{HB}}^0, s_{\text{free}}^0, t^0 \rangle$	0.04%	-0.001	0.004	-0.006
4188.1	0.065	-0.001	-0.002	-0.000	$\langle 320 R^1, b^2, s_{\text{HB}}^0, s_{\text{free}}^0, t^0 \rangle$	26.04%	0.001	0.001	0.000
					$\langle 320 R^1, b^2, s_{\text{HB}}^0, s_{\text{free}}^0, t^1 \rangle$	12.62%	0.000	0.000	0.000
					$\langle 320 R^3, b^1, s_{\text{HB}}^0, s_{\text{free}}^0, t^1 \rangle$	6.93%	0.000	0.000	0.000
					$\langle 320 R^1, b^0, s_{\text{HB}}^1, s_{\text{free}}^0, t^0 \rangle$	6.22%	0.002	0.001	-0.001
					$\langle 320 R^0, b^1, s_{\text{HB}}^0, s_{\text{free}}^1, t^0 \rangle$	0.65%	0.000	-0.001	-0.001
					$\langle 320 R^0, b^0, s_{\text{HB}}^0, s_{\text{free}}^1, t^0 \rangle$	0.01%	-0.001	-0.001	-0.001
4246.1	2.374	0.001	0.015	-0.002	$\langle 329 R^1, b^0, s_{\text{HB}}^0, s_{\text{free}}^1, t^0 \rangle$	69.57%	0.011	-0.006	0.028
					$\langle 329 R^1, b^0, s_{\text{HB}}^0, s_{\text{free}}^0, t^0 \rangle$	1.26%	-0.004	0.024	-0.031
					$\langle 329 R^0, b^0, s_{\text{HB}}^0, s_{\text{free}}^1, t^0 \rangle$	0.21%	-0.006	-0.007	-0.005
4256.3	0.089	0.001	-0.003	0.001	$\langle 332 R^4, b^0, s_{\text{HB}}^0, s_{\text{free}}^0, t^0 \rangle$	58.91%	0.000	0.000	0.000
					$\langle 332 R^1, b^0, s_{\text{HB}}^1, s_{\text{free}}^0, t^0 \rangle$	2.29%	0.001	0.000	0.000
					$\langle 332 R^1, b^0, s_{\text{HB}}^0, s_{\text{free}}^1, t^0 \rangle$	0.32%	-0.001	0.000	-0.002

					$\langle 332 R^1, b^0, s_{\text{HB}}^0, s_{\text{free}}^0, t^0 \rangle$	0.03%	0.001	-0.004	0.005
4277.6	0.456	-0.003	0.005	-0.001	$\langle 338 R^1, b^0, s_{\text{HB}}^1, s_{\text{free}}^0, t^0 \rangle$	50.05%	-0.004	-0.002	0.002
					$\langle 338 R^1, b^2, s_{\text{HB}}^0, s_{\text{free}}^0, t^0 \rangle$	5.03%	0.000	0.000	0.000
					$\langle 338 R^1, b^0, s_{\text{HB}}^0, s_{\text{free}}^0, t^0 \rangle$	0.03%	-0.001	0.003	-0.005
					$\langle 338 R^0, b^0, s_{\text{HB}}^1, s_{\text{free}}^0, t^0 \rangle$	0.01%	0.003	0.000	0.000
4278.4	0.067	0.001	-0.002	0.001	$\langle 339 R^1, b^0, s_{\text{HB}}^1, s_{\text{free}}^0, t^2 \rangle$	29.45%	-0.001	0.000	0.000
					$\langle 339 R^3, b^1, s_{\text{HB}}^0, s_{\text{free}}^0, t^1 \rangle$	10.76%	0.001	0.000	0.000
					$\langle 339 R^1, b^2, s_{\text{HB}}^0, s_{\text{free}}^0, t^1 \rangle$	7.95%	0.000	0.000	0.000
					$\langle 339 R^1, b^0, s_{\text{HB}}^1, s_{\text{free}}^0, t^1 \rangle$	4.63%	0.002	0.000	0.000
					$\langle 339 R^1, b^0, s_{\text{HB}}^1, s_{\text{free}}^0, t^0 \rangle$	2.76%	0.002	0.000	0.000
					$\langle 339 R^1, b^0, s_{\text{HB}}^0, s_{\text{free}}^0, t^0 \rangle$	0.01%	0.000	-0.002	0.003
4281.8	0.060	0.000	0.002	-0.000	$\langle 342 R^3, b^1, s_{\text{HB}}^0, s_{\text{free}}^0, t^0 \rangle$	50.27%	0.000	0.000	0.000
					$\langle 342 R^1, b^1, s_{\text{HB}}^0, s_{\text{free}}^0, t^0 \rangle$	0.80%	0.000	-0.001	0.002
					$\langle 342 R^1, b^0, s_{\text{HB}}^0, s_{\text{free}}^1, t^0 \rangle$	0.77%	0.001	-0.001	0.003
					$\langle 342 R^1, b^0, s_{\text{HB}}^0, s_{\text{free}}^0, t^0 \rangle$	0.05%	-0.001	0.005	-0.006
4300.3	0.140	0.002	-0.003	0.000	$\langle 347 R^5, b^0, s_{\text{HB}}^0, s_{\text{free}}^0, t^0 \rangle$	26.07%	0.000	0.004	-0.006
					$\langle 347 R^3, b^1, s_{\text{HB}}^0, s_{\text{free}}^0, t^0 \rangle$	18.59%	0.000	-0.003	0.005
					$\langle 347 R^4, b^0, s_{\text{HB}}^0, s_{\text{free}}^0, t^0 \rangle$	8.44%	0.000	-0.002	0.004
					$\langle 347 R^3, b^0, s_{\text{HB}}^0, s_{\text{free}}^0, t^0 \rangle$	2.26%	0.001	-0.005	0.006
4492.9	1.560	0.008	-0.008	0.003	$\langle 387 R^1, b^0, s_{\text{HB}}^0, s_{\text{free}}^1, t^0 \rangle$	82.68%	-0.001	0.000	-0.004
					$\langle 387 R^1, b^0, s_{\text{HB}}^0, s_{\text{free}}^0, t^0 \rangle$	0.71%	0.005	-0.004	0.007
4518.5	0.153	-0.004	0.000	-0.001	$\langle 395 R^1, b^0, s_{\text{HB}}^1, s_{\text{free}}^0, t^0 \rangle$	57.89%	-0.002	-0.001	0.003
					$\langle 395 R^1, b^0, s_{\text{HB}}^1, s_{\text{free}}^0, t^1 \rangle$	6.98%	0.000	0.000	0.000
					$\langle 395 R^1, b^2, s_{\text{HB}}^0, s_{\text{free}}^0, t^0 \rangle$	6.18%	0.000	0.000	0.000
					$\langle 395 R^1, b^0, s_{\text{HB}}^0, s_{\text{free}}^0, t^0 \rangle$	0.02%	0.000	0.003	-0.004
					$\langle 395 R^0, b^0, s_{\text{HB}}^1, s_{\text{free}}^0, t^0 \rangle$	0.02%	0.004	0.000	0.000
4620.8	0.179	-0.003	0.002	-0.000	$\langle 421 R^1, b^0, s_{\text{HB}}^1, s_{\text{free}}^0, t^0 \rangle$	25.29%	-0.004	-0.001	0.001
					$\langle 421 R^2, b^2, s_{\text{HB}}^0, s_{\text{free}}^0, t^0 \rangle$	17.78%	-0.001	0.001	0.002
					$\langle 421 R^0, b^3, s_{\text{HB}}^0, s_{\text{free}}^0, t^0 \rangle$	8.06%	-0.001	0.001	0.001
					$\langle 421 R^3, b^1, s_{\text{HB}}^0, s_{\text{free}}^0, t^0 \rangle$	4.80%	0.000	0.002	-0.004
					$\langle 421 R^2, b^1, s_{\text{HB}}^0, s_{\text{free}}^0, t^0 \rangle$	1.92%	0.001	0.000	-0.003
					$\langle 421 R^0, b^0, s_{\text{HB}}^1, s_{\text{free}}^0, t^0 \rangle$	0.05%	0.007	0.000	-0.001
4622.3	0.126	0.002	-0.003	0.000	$\langle 422 R^1, b^0, s_{\text{HB}}^1, s_{\text{free}}^0, t^0 \rangle$	31.87%	0.006	0.001	-0.001
					$\langle 422 R^2, b^2, s_{\text{HB}}^0, s_{\text{free}}^0, t^0 \rangle$	12.85%	-0.001	0.001	0.002
					$\langle 422 R^0, b^3, s_{\text{HB}}^0, s_{\text{free}}^0, t^0 \rangle$	5.53%	-0.001	0.001	0.001
					$\langle 422 R^3, b^1, s_{\text{HB}}^0, s_{\text{free}}^0, t^0 \rangle$	3.82%	0.000	0.002	-0.003
					$\langle 422 R^0, b^1, s_{\text{HB}}^0, s_{\text{free}}^0, t^0 \rangle$	0.07%	0.002	-0.002	-0.002
					$\langle 422 R^1, b^0, s_{\text{HB}}^0, s_{\text{free}}^0, t^0 \rangle$	0.01%	0.000	-0.003	0.003
4661.0	0.090	-0.003	0.001	-0.001	$\langle 429 R^3, b^1, s_{\text{HB}}^0, s_{\text{free}}^0, t^0 \rangle$	23.28%	0.000	0.000	0.000
					$\langle 429 R^5, b^0, s_{\text{HB}}^0, s_{\text{free}}^0, t^0 \rangle$	21.55%	0.000	0.000	0.000
					$\langle 429 R^1, b^2, s_{\text{HB}}^0, s_{\text{free}}^0, t^0 \rangle$	21.29%	0.000	0.000	0.000
					$\langle 429 R^2, b^0, s_{\text{HB}}^1, s_{\text{free}}^0, t^0 \rangle$	0.43%	0.001	0.001	-0.002

					$\langle 429 R^2, b^0, s_{\text{HB}}^0, s_{\text{free}}^1, t^0 \rangle$	0.28%	0.001	0.000	0.001
					$\langle 429 R^0, b^0, s_{\text{HB}}^0, s_{\text{free}}^1, t^0 \rangle$	0.01%	-0.001	-0.001	-0.001
4740.2	0.125	0.001	0.003	0.001	$\langle 454 R^1, b^0, s_{\text{HB}}^0, s_{\text{free}}^1, t^0 \rangle$	51.37%	0.000	0.002	0.000
					$\langle 454 R^3, b^1, s_{\text{HB}}^0, s_{\text{free}}^0, t^0 \rangle$	18.18%	0.000	0.000	0.000
					$\langle 454 R^2, b^0, s_{\text{HB}}^0, s_{\text{free}}^1, t^0 \rangle$	1.76%	0.002	0.001	0.003
					$\langle 454 R^0, b^0, s_{\text{HB}}^0, s_{\text{free}}^1, t^0 \rangle$	0.04%	-0.003	-0.003	-0.002
					$\langle 454 R^0, b^0, s_{\text{HB}}^1, s_{\text{free}}^0, t^0 \rangle$	0.01%	-0.003	0.000	0.000
4742.9	0.070	0.001	0.002	0.001	$\langle 455 R^3, b^1, s_{\text{HB}}^0, s_{\text{free}}^0, t^0 \rangle$	30.43%	0.000	0.000	0.000
					$\langle 455 R^1, b^0, s_{\text{HB}}^0, s_{\text{free}}^1, t^0 \rangle$	24.03%	0.000	0.001	0.000
					$\langle 455 R^5, b^0, s_{\text{HB}}^0, s_{\text{free}}^0, t^0 \rangle$	5.21%	0.000	0.000	0.000
					$\langle 455 R^2, b^0, s_{\text{HB}}^1, s_{\text{free}}^0, t^0 \rangle$	1.03%	0.002	0.001	-0.003
					$\langle 455 R^0, b^0, s_{\text{HB}}^1, s_{\text{free}}^0, t^0 \rangle$	0.02%	-0.004	0.000	0.000
					$\langle 455 R^0, b^0, s_{\text{HB}}^0, s_{\text{free}}^1, t^0 \rangle$	0.02%	-0.002	-0.002	-0.002
4830.7	0.085	-0.002	-0.002	-0.001	$\langle 476 R^0, b^3, s_{\text{HB}}^0, s_{\text{free}}^0, t^0 \rangle$	24.86%	-0.002	0.002	0.001
					$\langle 476 R^1, b^0, s_{\text{HB}}^0, s_{\text{free}}^1, t^1 \rangle$	23.76%	0.000	0.000	0.000
					$\langle 476 R^2, b^0, s_{\text{HB}}^1, s_{\text{free}}^0, t^0 \rangle$	5.22%	0.003	0.003	-0.006
					$\langle 476 R^0, b^0, s_{\text{HB}}^1, s_{\text{free}}^0, t^0 \rangle$	0.06%	-0.008	0.000	0.001
					$\langle 476 R^0, b^0, s_{\text{HB}}^0, s_{\text{free}}^1, t^0 \rangle$	0.05%	-0.003	-0.003	-0.002
4850.0	1.008	-0.005	0.008	-0.000	$\langle 486 R^1, b^0, s_{\text{HB}}^0, s_{\text{free}}^1, t^0 \rangle$	81.54%	-0.002	0.004	0.003
					$\langle 486 R^1, b^0, s_{\text{HB}}^0, s_{\text{free}}^0, t^0 \rangle$	0.03%	-0.001	0.004	-0.005
4916.8	0.178	-0.003	-0.002	-0.001	$\langle 503 R^0, b^1, s_{\text{HB}}^1, s_{\text{free}}^0, t^1 \rangle$	17.35%	0.000	0.000	0.000
					$\langle 503 R^2, b^0, s_{\text{HB}}^1, s_{\text{free}}^0, t^1 \rangle$	13.04%	0.004	0.001	0.000
					$\langle 503 R^5, b^0, s_{\text{HB}}^0, s_{\text{free}}^0, t^1 \rangle$	7.43%	0.000	0.000	0.000
					$\langle 503 R^2, b^2, s_{\text{HB}}^0, s_{\text{free}}^0, t^1 \rangle$	5.95%	0.000	0.000	0.000
					$\langle 503 R^2, b^0, s_{\text{HB}}^1, s_{\text{free}}^0, t^0 \rangle$	1.82%	0.002	0.002	-0.003
					$\langle 503 R^0, b^0, s_{\text{HB}}^1, s_{\text{free}}^0, t^0 \rangle$	0.02%	-0.005	0.000	0.001
4922.0	0.120	0.002	0.002	0.001	$\langle 505 R^5, b^0, s_{\text{HB}}^0, s_{\text{free}}^0, t^1 \rangle$	48.48%	0.000	0.000	0.000
					$\langle 505 R^0, b^1, s_{\text{HB}}^1, s_{\text{free}}^0, t^1 \rangle$	6.90%	0.000	0.000	0.000
					$\langle 505 R^0, b^1, s_{\text{HB}}^1, s_{\text{free}}^0, t^0 \rangle$	2.41%	0.003	0.000	-0.001
					$\langle 505 R^2, b^0, s_{\text{HB}}^1, s_{\text{free}}^0, t^0 \rangle$	0.67%	-0.001	-0.001	0.002
					$\langle 505 R^0, b^0, s_{\text{HB}}^1, s_{\text{free}}^0, t^0 \rangle$	0.01%	0.003	0.000	0.000
4944.9	1.431	-0.008	-0.007	-0.003	$\langle 513 R^0, b^1, s_{\text{HB}}^1, s_{\text{free}}^0, t^0 \rangle$	38.30%	-0.011	-0.001	0.003
					$\langle 513 R^2, b^0, s_{\text{HB}}^1, s_{\text{free}}^0, t^1 \rangle$	10.34%	-0.003	-0.001	0.000
					$\langle 513 R^4, b^1, s_{\text{HB}}^0, s_{\text{free}}^0, t^0 \rangle$	7.44%	0.000	-0.001	0.002
					$\langle 513 R^2, b^0, s_{\text{HB}}^1, s_{\text{free}}^0, t^0 \rangle$	2.29%	0.002	0.002	-0.004
					$\langle 513 R^0, b^0, s_{\text{HB}}^1, s_{\text{free}}^0, t^0 \rangle$	0.02%	-0.004	0.000	0.000
4965.0	0.058	-0.001	-0.002	-0.001	$\langle 518 R^0, b^3, s_{\text{HB}}^0, s_{\text{free}}^0, t^2 \rangle$	29.98%	0.000	0.000	0.000
					$\langle 518 R^0, b^1, s_{\text{HB}}^1, s_{\text{free}}^0, t^2 \rangle$	9.86%	0.000	0.000	0.000
					$\langle 518 R^2, b^2, s_{\text{HB}}^0, s_{\text{free}}^0, t^2 \rangle$	8.05%	0.000	0.000	0.000
					$\langle 518 R^5, b^0, s_{\text{HB}}^0, s_{\text{free}}^0, t^1 \rangle$	6.22%	0.000	0.000	0.000
					$\langle 518 R^2, b^0, s_{\text{HB}}^0, s_{\text{free}}^1, t^0 \rangle$	3.07%	0.002	0.001	0.004
					$\langle 518 R^0, b^1, s_{\text{HB}}^1, s_{\text{free}}^0, t^0 \rangle$	2.90%	-0.003	0.000	0.001

					$\langle 518 R^0, b^0, s_{\text{HB}}^0, s_{\text{free}}^1, t^0 \rangle$	0.06%	-0.003	-0.004	-0.003
4988.6	0.055	-0.001	-0.001	-0.001	$\langle 526 R^0, b^3, s_{\text{HB}}^0, s_{\text{free}}^0, t^1 \rangle$	24.15%	0.000	0.000	0.000
					$\langle 526 R^2, b^2, s_{\text{HB}}^0, s_{\text{free}}^0, t^1 \rangle$	14.20%	0.000	0.000	0.000
					$\langle 526 R^0, b^1, s_{\text{HB}}^1, s_{\text{free}}^0, t^1 \rangle$	11.03%	0.000	0.000	0.000
					$\langle 526 R^2, b^0, s_{\text{HB}}^1, s_{\text{free}}^0, t^1 \rangle$	6.67%	0.003	0.001	0.000
					$\langle 526 R^0, b^1, s_{\text{HB}}^1, s_{\text{free}}^0, t^0 \rangle$	2.02%	-0.003	0.000	0.001
					$\langle 526 R^0, b^0, s_{\text{HB}}^1, s_{\text{free}}^0, t^0 \rangle$	0.01%	-0.003	0.000	0.000
5029.6	0.571	-0.005	-0.004	-0.002	$\langle 538 R^2, b^2, s_{\text{HB}}^0, s_{\text{free}}^0, t^0 \rangle$	20.72%	-0.001	0.001	0.003
					$\langle 538 R^4, b^1, s_{\text{HB}}^0, s_{\text{free}}^0, t^0 \rangle$	17.02%	0.000	0.001	-0.003
					$\langle 538 R^0, b^3, s_{\text{HB}}^0, s_{\text{free}}^0, t^0 \rangle$	8.34%	0.000	0.000	0.000
					$\langle 538 R^0, b^1, s_{\text{HB}}^0, s_{\text{free}}^1, t^0 \rangle$	6.52%	-0.002	-0.003	-0.003
					$\langle 538 R^2, b^0, s_{\text{HB}}^1, s_{\text{free}}^0, t^0 \rangle$	3.52%	0.003	0.003	-0.005
					$\langle 538 R^0, b^0, s_{\text{HB}}^1, s_{\text{free}}^0, t^0 \rangle$	0.07%	-0.008	0.000	0.001
5065.5	0.098	-0.002	-0.002	-0.001	$\langle 549 R^0, b^1, s_{\text{HB}}^1, s_{\text{free}}^0, t^2 \rangle$	20.41%	0.000	0.000	0.000
					$\langle 549 R^0, b^1, s_{\text{HB}}^1, s_{\text{free}}^0, t^1 \rangle$	9.01%	0.000	0.000	0.000
					$\langle 549 R^0, b^3, s_{\text{HB}}^0, s_{\text{free}}^0, t^1 \rangle$	8.23%	0.000	0.000	0.000
					$\langle 549 R^2, b^0, s_{\text{HB}}^1, s_{\text{free}}^0, t^1 \rangle$	6.00%	0.002	0.000	0.000
					$\langle 549 R^0, b^3, s_{\text{HB}}^0, s_{\text{free}}^0, t^2 \rangle$	5.39%	0.000	0.000	0.000
					$\langle 549 R^2, b^2, s_{\text{HB}}^0, s_{\text{free}}^0, t^2 \rangle$	5.01%	0.000	0.000	0.000
					$\langle 549 R^0, b^1, s_{\text{HB}}^1, s_{\text{free}}^0, t^0 \rangle$	1.99%	-0.003	0.000	0.001
					$\langle 549 R^2, b^0, s_{\text{HB}}^1, s_{\text{free}}^0, t^0 \rangle$	0.65%	0.001	0.001	-0.002
					$\langle 549 R^0, b^0, s_{\text{HB}}^1, s_{\text{free}}^0, t^0 \rangle$	0.01%	-0.004	0.000	0.000
5169.0	0.451	-0.006	-0.001	-0.001	$\langle 581 R^4, b^1, s_{\text{HB}}^0, s_{\text{free}}^0, t^0 \rangle$	18.03%	0.000	0.000	0.000
					$\langle 581 R^0, b^1, s_{\text{HB}}^0, s_{\text{free}}^1, t^0 \rangle$	11.03%	-0.002	-0.004	-0.004
					$\langle 581 R^2, b^2, s_{\text{HB}}^0, s_{\text{free}}^0, t^0 \rangle$	9.68%	0.000	0.000	0.000
					$\langle 581 R^2, b^0, s_{\text{HB}}^1, s_{\text{free}}^0, t^1 \rangle$	6.49%	0.000	0.000	0.000
					$\langle 581 R^2, b^0, s_{\text{HB}}^0, s_{\text{free}}^1, t^0 \rangle$	5.07%	0.000	0.000	0.000
					$\langle 581 R^0, b^1, s_{\text{HB}}^0, s_{\text{free}}^0, t^0 \rangle$	0.07%	-0.003	0.002	0.002
					$\langle 581 R^0, b^0, s_{\text{HB}}^0, s_{\text{free}}^1, t^0 \rangle$	0.05%	-0.003	-0.003	-0.002
5173.1	2.412	0.013	0.004	0.003	$\langle 583 R^0, b^1, s_{\text{HB}}^0, s_{\text{free}}^1, t^0 \rangle$	58.25%	0.005	0.010	0.008
					$\langle 583 R^2, b^0, s_{\text{HB}}^0, s_{\text{free}}^1, t^0 \rangle$	6.39%	-0.003	-0.001	-0.005
					$\langle 583 R^0, b^1, s_{\text{HB}}^0, s_{\text{free}}^0, t^0 \rangle$	0.41%	0.006	-0.006	-0.005
					$\langle 583 R^0, b^0, s_{\text{HB}}^0, s_{\text{free}}^1, t^0 \rangle$	0.13%	0.005	0.005	0.004
6388.1	0.062	0.002	-0.000	0.000	$\langle 1074 R^1, b^1, s_{\text{HB}}^0, s_{\text{free}}^1, t^0 \rangle$	12.41%	0.000	0.000	0.000
					$\langle 1074 R^2, b^3, s_{\text{HB}}^0, s_{\text{free}}^0, t^0 \rangle$	8.43%	0.000	0.000	0.000
					$\langle 1074 R^2, b^1, s_{\text{HB}}^1, s_{\text{free}}^0, t^0 \rangle$	8.27%	0.004	0.000	-0.003
					$\langle 1074 R^0, b^2, s_{\text{HB}}^1, s_{\text{free}}^0, t^0 \rangle$	6.44%	0.002	0.000	-0.001
					$\langle 1074 R^0, b^4, s_{\text{HB}}^0, s_{\text{free}}^0, t^0 \rangle$	5.17%	0.000	0.000	0.000
					$\langle 1074 R^0, b^0, s_{\text{HB}}^2, s_{\text{free}}^0, t^0 \rangle$	3.70%	0.003	-0.001	-0.002
					$\langle 1074 R^0, b^0, s_{\text{HB}}^1, s_{\text{free}}^0, t^0 \rangle$	0.02%	-0.004	0.000	0.000
6430.8	0.204	0.003	-0.001	0.001	$\langle 1092 R^6, b^0, s_{\text{HB}}^0, s_{\text{free}}^0, t^0 \rangle$	25.99%	0.000	0.000	0.000
					$\langle 1092 R^0, b^0, s_{\text{HB}}^2, s_{\text{free}}^0, t^0 \rangle$	11.85%	0.006	-0.002	-0.003

					$\langle 1092 R^2, b^1, s_{\text{HB}}^1, s_{\text{free}}^0, t^0 \rangle$	3.17%	-0.002	0.000	0.002
					$\langle 1092 R^0, b^0, s_{\text{HB}}^0, s_{\text{free}}^1, t^0 \rangle$	0.03%	0.002	0.003	0.002
6431.8	0.249	0.004	-0.001	0.001	$\langle 1093 R^6, b^0, s_{\text{HB}}^0, s_{\text{free}}^0, t^0 \rangle$	22.13%	0.000	0.000	0.000
					$\langle 1093 R^0, b^0, s_{\text{HB}}^2, s_{\text{free}}^0, t^0 \rangle$	14.40%	0.007	-0.002	-0.004
					$\langle 1093 R^0, b^0, s_{\text{HB}}^2, s_{\text{free}}^0, t^1 \rangle$	5.14%	-0.002	0.000	0.000
					$\langle 1093 R^2, b^1, s_{\text{HB}}^1, s_{\text{free}}^0, t^0 \rangle$	4.21%	-0.003	0.000	0.002
					$\langle 1093 R^0, b^0, s_{\text{HB}}^0, s_{\text{free}}^1, t^0 \rangle$	0.04%	0.003	0.003	0.002
6460.0	0.154	0.003	-0.000	0.000	$\langle 1108 R^0, b^4, s_{\text{HB}}^0, s_{\text{free}}^0, t^1 \rangle$	10.86%	0.000	0.000	0.000
					$\langle 1108 R^0, b^0, s_{\text{HB}}^2, s_{\text{free}}^0, t^0 \rangle$	8.41%	0.005	-0.002	-0.003
					$\langle 1108 R^0, b^2, s_{\text{HB}}^1, s_{\text{free}}^0, t^1 \rangle$	8.38%	0.000	0.000	0.000
					$\langle 1108 R^5, b^1, s_{\text{HB}}^0, s_{\text{free}}^0, t^0 \rangle$	6.80%	0.000	0.000	0.000
					$\langle 1108 R^0, b^0, s_{\text{HB}}^1, s_{\text{free}}^1, t^0 \rangle$	0.47%	-0.003	0.000	0.000
					$\langle 1108 R^0, b^0, s_{\text{HB}}^0, s_{\text{free}}^1, t^0 \rangle$	0.03%	0.002	0.002	0.002
6462.1	0.059	-0.002	0.000	-0.000	$\langle 1112 R^5, b^0, s_{\text{HB}}^0, s_{\text{free}}^0, t^1 \rangle$	5.19%	0.000	0.000	0.000
					$\langle 1112 R^5, b^1, s_{\text{HB}}^0, s_{\text{free}}^0, t^0 \rangle$	5.03%	0.000	0.000	0.000
					$\langle 1112 R^0, b^0, s_{\text{HB}}^2, s_{\text{free}}^0, t^0 \rangle$	3.13%	-0.003	0.001	0.002
					$\langle 1112 R^0, b^0, s_{\text{HB}}^1, s_{\text{free}}^1, t^0 \rangle$	0.17%	0.002	0.000	0.000
					$\langle 1112 R^0, b^0, s_{\text{HB}}^0, s_{\text{free}}^1, t^0 \rangle$	0.01%	-0.001	-0.001	-0.001
6479.6	0.127	0.003	0.000	0.001	$\langle 1119 R^1, b^1, s_{\text{HB}}^0, s_{\text{free}}^1, t^0 \rangle$	23.61%	0.001	0.000	0.000
					$\langle 1119 R^0, b^2, s_{\text{HB}}^1, s_{\text{free}}^0, t^0 \rangle$	6.34%	-0.002	0.000	0.000
					$\langle 1119 R^6, b^0, s_{\text{HB}}^0, s_{\text{free}}^0, t^0 \rangle$	5.22%	0.000	0.000	0.000
					$\langle 1119 R^0, b^0, s_{\text{HB}}^2, s_{\text{free}}^0, t^0 \rangle$	3.33%	0.003	-0.001	-0.002
					$\langle 1119 R^0, b^0, s_{\text{HB}}^1, s_{\text{free}}^1, t^0 \rangle$	0.31%	-0.002	0.000	0.000
					$\langle 1119 R^0, b^0, s_{\text{HB}}^0, s_{\text{free}}^2, t^0 \rangle$	0.26%	0.002	0.001	0.001
6483.0	0.100	0.002	-0.000	0.000	$\langle 1121 R^0, b^2, s_{\text{HB}}^1, s_{\text{free}}^0, t^0 \rangle$	11.16%	-0.002	0.000	0.001
					$\langle 1121 R^2, b^3, s_{\text{HB}}^0, s_{\text{free}}^0, t^0 \rangle$	8.09%	0.000	0.000	0.000
					$\langle 1121 R^1, b^1, s_{\text{HB}}^0, s_{\text{free}}^1, t^1 \rangle$	5.47%	0.000	0.000	0.000
					$\langle 1121 R^0, b^4, s_{\text{HB}}^0, s_{\text{free}}^0, t^0 \rangle$	5.43%	0.000	0.000	0.000
					$\langle 1121 R^0, b^0, s_{\text{HB}}^2, s_{\text{free}}^0, t^0 \rangle$	2.98%	0.003	-0.001	-0.002
					$\langle 1121 R^0, b^0, s_{\text{HB}}^1, s_{\text{free}}^1, t^0 \rangle$	1.14%	-0.004	0.000	0.001
					$\langle 1121 R^0, b^0, s_{\text{HB}}^1, s_{\text{free}}^0, t^0 \rangle$	0.03%	0.005	0.000	-0.001
6549.6	0.199	0.003	-0.000	0.000	$\langle 1154 R^0, b^0, s_{\text{HB}}^2, s_{\text{free}}^0, t^1 \rangle$	20.86%	0.003	0.001	0.000
					$\langle 1154 R^0, b^0, s_{\text{HB}}^2, s_{\text{free}}^0, t^0 \rangle$	11.87%	0.006	-0.002	-0.003
					$\langle 1154 R^0, b^0, s_{\text{HB}}^2, s_{\text{free}}^0, t^2 \rangle$	11.27%	0.000	0.000	0.000
					$\langle 1154 R^0, b^4, s_{\text{HB}}^0, s_{\text{free}}^0, t^1 \rangle$	10.16%	0.000	0.000	0.000
					$\langle 1154 R^2, b^3, s_{\text{HB}}^0, s_{\text{free}}^0, t^1 \rangle$	5.09%	0.000	0.000	0.000
					$\langle 1154 R^0, b^0, s_{\text{HB}}^1, s_{\text{free}}^1, t^0 \rangle$	0.79%	-0.003	0.000	0.001
6745.1	0.094	0.001	0.002	0.001	$\langle 1247 R^0, b^2, s_{\text{HB}}^0, s_{\text{free}}^1, t^0 \rangle$	25.57%	0.002	0.002	0.002
					$\langle 1247 R^4, b^0, s_{\text{HB}}^1, s_{\text{free}}^0, t^0 \rangle$	6.71%	0.001	0.001	-0.002
					$\langle 1247 R^0, b^0, s_{\text{HB}}^1, s_{\text{free}}^1, t^0 \rangle$	5.98%	-0.009	0.000	0.002
					$\langle 1247 R^0, b^0, s_{\text{HB}}^1, s_{\text{free}}^0, t^0 \rangle$	0.07%	0.008	0.000	-0.001
6838.3	0.083	-0.000	-0.002	-0.001	$\langle 1304 R^5, b^1, s_{\text{HB}}^0, s_{\text{free}}^0, t^0 \rangle$	9.78%	0.000	0.000	0.000

					$\langle 1304 R^0, b^0, s_{\text{HB}}^1, s_{\text{free}}^1, t^0 \rangle$	6.82%	0.010	0.000	-0.002
					$\langle 1304 R^4, b^0, s_{\text{HB}}^0, s_{\text{free}}^1, t^0 \rangle$	6.00%	0.000	0.000	-0.002
					$\langle 1304 R^2, b^1, s_{\text{HB}}^0, s_{\text{free}}^1, t^0 \rangle$	5.24%	0.000	0.001	0.002
					$\langle 1304 R^2, b^0, s_{\text{HB}}^1, s_{\text{free}}^0, t^0 \rangle$	0.74%	-0.001	-0.001	0.002
					$\langle 1304 R^0, b^0, s_{\text{HB}}^1, s_{\text{free}}^0, t^0 \rangle$	0.13%	-0.011	0.000	0.001
6867.5	0.065	-0.000	0.002	0.001	$\langle 1318 R^2, b^3, s_{\text{HB}}^0, s_{\text{free}}^0, t^0 \rangle$	21.89%	0.000	0.000	0.000
					$\langle 1318 R^0, b^0, s_{\text{HB}}^1, s_{\text{free}}^1, t^0 \rangle$	8.24%	-0.011	0.000	0.002
					$\langle 1318 R^2, b^1, s_{\text{HB}}^1, s_{\text{free}}^0, t^0 \rangle$	5.49%	0.000	0.000	0.000
					$\langle 1318 R^0, b^0, s_{\text{HB}}^1, s_{\text{free}}^0, t^0 \rangle$	0.17%	0.013	0.000	-0.001
					$\langle 1318 R^0, b^0, s_{\text{HB}}^0, s_{\text{free}}^1, t^0 \rangle$	0.03%	0.002	0.002	0.002
6871.1	0.136	0.000	-0.002	-0.002	$\langle 1320 R^0, b^0, s_{\text{HB}}^1, s_{\text{free}}^1, t^0 \rangle$	20.76%	0.017	-0.001	-0.003
					$\langle 1320 R^0, b^2, s_{\text{HB}}^0, s_{\text{free}}^1, t^0 \rangle$	7.91%	0.001	0.001	0.001
					$\langle 1320 R^0, b^0, s_{\text{HB}}^1, s_{\text{free}}^0, t^0 \rangle$	0.37%	-0.019	0.000	0.002
					$\langle 1320 R^0, b^0, s_{\text{HB}}^0, s_{\text{free}}^1, t^0 \rangle$	0.06%	-0.003	-0.004	-0.003
6878.3	0.114	0.000	-0.002	-0.001	$\langle 1323 R^0, b^0, s_{\text{HB}}^1, s_{\text{free}}^1, t^0 \rangle$	12.93%	0.013	-0.001	-0.002
					$\langle 1323 R^0, b^2, s_{\text{HB}}^0, s_{\text{free}}^1, t^2 \rangle$	9.21%	0.000	0.000	0.000
					$\langle 1323 R^2, b^1, s_{\text{HB}}^1, s_{\text{free}}^0, t^2 \rangle$	8.57%	0.000	0.000	0.000
					$\langle 1323 R^0, b^2, s_{\text{HB}}^1, s_{\text{free}}^0, t^2 \rangle$	5.83%	0.000	0.000	0.000
					$\langle 1323 R^0, b^0, s_{\text{HB}}^1, s_{\text{free}}^0, t^0 \rangle$	0.23%	-0.015	0.000	0.002
					$\langle 1323 R^0, b^0, s_{\text{HB}}^0, s_{\text{free}}^1, t^0 \rangle$	0.02%	-0.002	-0.002	-0.002
6957.4	0.189	0.001	0.003	0.001	$\langle 1365 R^3, b^2, s_{\text{HB}}^0, s_{\text{free}}^0, t^0 \rangle$	10.70%	0.000	0.000	0.000
					$\langle 1365 R^0, b^0, s_{\text{HB}}^0, s_{\text{free}}^2, t^0 \rangle$	5.76%	0.008	0.005	0.004
					$\langle 1365 R^0, b^0, s_{\text{HB}}^0, s_{\text{free}}^1, t^0 \rangle$	0.04%	-0.002	-0.003	-0.002
					$\langle 1365 R^0, b^0, s_{\text{HB}}^1, s_{\text{free}}^0, t^0 \rangle$	0.00%	-0.002	0.000	0.000
6957.9	0.101	0.001	0.002	0.001	$\langle 1366 R^3, b^2, s_{\text{HB}}^0, s_{\text{free}}^2, t^2 \rangle$	16.51%	0.000	0.000	0.000
					$\langle 1366 R^3, b^0, s_{\text{HB}}^1, s_{\text{free}}^0, t^2 \rangle$	6.02%	0.000	0.000	0.000
					$\langle 1366 R^0, b^0, s_{\text{HB}}^0, s_{\text{free}}^2, t^0 \rangle$	3.12%	0.006	0.004	0.003
					$\langle 1366 R^0, b^0, s_{\text{HB}}^0, s_{\text{free}}^1, t^0 \rangle$	0.02%	-0.002	-0.002	-0.001
					$\langle 1366 R^0, b^0, s_{\text{HB}}^1, s_{\text{free}}^0, t^0 \rangle$	0.00%	-0.002	0.000	0.000
6958.6	0.957	0.002	0.007	0.003	$\langle 1367 R^0, b^0, s_{\text{HB}}^0, s_{\text{free}}^2, t^0 \rangle$	28.98%	0.017	0.012	0.008
					$\langle 1367 R^3, b^2, s_{\text{HB}}^0, s_{\text{free}}^0, t^0 \rangle$	18.89%	0.000	0.000	0.000
					$\langle 1367 R^0, b^0, s_{\text{HB}}^1, s_{\text{free}}^1, t^1 \rangle$	5.41%	0.001	0.000	0.000
					$\langle 1367 R^0, b^0, s_{\text{HB}}^0, s_{\text{free}}^1, t^0 \rangle$	0.18%	-0.006	-0.006	-0.004
					$\langle 1367 R^0, b^0, s_{\text{HB}}^1, s_{\text{free}}^0, t^0 \rangle$	0.02%	-0.005	0.000	0.001
6959.3	0.684	0.001	0.005	0.003	$\langle 1368 R^0, b^0, s_{\text{HB}}^0, s_{\text{free}}^2, t^0 \rangle$	20.74%	0.015	0.010	0.007
					$\langle 1368 R^3, b^2, s_{\text{HB}}^0, s_{\text{free}}^0, t^0 \rangle$	8.03%	0.000	0.000	0.000
					$\langle 1368 R^0, b^0, s_{\text{HB}}^0, s_{\text{free}}^1, t^0 \rangle$	0.13%	-0.005	-0.005	-0.004
					$\langle 1368 R^0, b^0, s_{\text{HB}}^1, s_{\text{free}}^0, t^0 \rangle$	0.02%	-0.005	0.000	0.000
6972.3	0.110	-0.001	-0.002	-0.001	$\langle 1380 R^3, b^0, s_{\text{HB}}^1, s_{\text{free}}^0, t^1 \rangle$	34.56%	0.000	0.000	0.000
					$\langle 1380 R^0, b^0, s_{\text{HB}}^1, s_{\text{free}}^1, t^1 \rangle$	5.35%	0.001	0.000	0.000
					$\langle 1380 R^5, b^1, s_{\text{HB}}^0, s_{\text{free}}^0, t^1 \rangle$	5.15%	0.000	0.000	0.000
					$\langle 1380 R^0, b^0, s_{\text{HB}}^0, s_{\text{free}}^2, t^0 \rangle$	4.49%	-0.007	-0.005	-0.003

					$\langle 1380 R^0, b^0, s_{\text{HB}}^1, s_{\text{free}}^0, t^0 \rangle$	0.03%	0.005	0.000	-0.001
					$\langle 1380 R^0, b^0, s_{\text{HB}}^0, s_{\text{free}}^1, t^0 \rangle$	0.03%	0.002	0.003	0.002
6973.7	0.462	-0.001	-0.005	-0.002	$\langle 1381 R^0, b^0, s_{\text{HB}}^1, s_{\text{free}}^1, t^1 \rangle$	28.84%	0.003	0.000	0.000
					$\langle 1381 R^0, b^0, s_{\text{HB}}^0, s_{\text{free}}^2, t^0 \rangle$	19.40%	-0.014	-0.010	-0.007
					$\langle 1381 R^0, b^2, s_{\text{HB}}^0, s_{\text{free}}^1, t^1 \rangle$	6.62%	0.000	0.000	0.000
					$\langle 1381 R^0, b^0, s_{\text{HB}}^0, s_{\text{free}}^1, t^0 \rangle$	0.14%	0.005	0.005	0.004
					$\langle 1381 R^0, b^0, s_{\text{HB}}^1, s_{\text{free}}^0, t^0 \rangle$	0.13%	0.011	0.000	-0.001

MeOH₂ ··· (N₂)₂

ω	I	μ_x	μ_y	μ_z	Assignment	$ c_n ^2$	$\mu_x^{g \rightarrow n}$	$\mu_y^{g \rightarrow n}$	$\mu_z^{g \rightarrow n}$
4022.0	0.822	-0.007	0.006	0.000	$\langle 928 R^1, b^0, s_{\text{sym}}^1, s_{\text{asym}}^0, t^0, s_X^0 \rangle$	41.23%	0.009	0.010	0.000
					$\langle 928 R^1, b^2, s_{\text{sym}}^0, s_{\text{asym}}^0, t^0, s_X^0 \rangle$	21.64%	0.003	0.001	0.000
					$\langle 928 R^3, b^0, s_{\text{sym}}^0, s_{\text{asym}}^0, t^0, s_X^0 \rangle$	4.76%	-0.007	-0.001	0.000
					$\langle 928 R^1, b^0, s_{\text{sym}}^0, s_{\text{asym}}^0, t^0, s_X^0 \rangle$	0.10%	-0.010	0.000	0.000
4029.4	0.185	0.000	-0.000	0.004	$\langle 932 R^4, b^0, s_{\text{sym}}^0, s_{\text{asym}}^0, t^0, s_X^0 \rangle$	58.12%	0.000	0.000	0.000
					$\langle 932 R^1, b^0, s_{\text{sym}}^0, s_{\text{asym}}^1, t^0, s_X^0 \rangle$	4.89%	0.000	0.000	0.005
					$\langle 932 R^2, b^0, s_{\text{sym}}^0, s_{\text{asym}}^1, t^0, s_X^0 \rangle$	0.54%	0.000	0.000	-0.002
					$\langle 932 R^0, b^0, s_{\text{sym}}^0, s_{\text{asym}}^1, t^0, s_X^0 \rangle$	0.00%	0.000	0.000	0.002
4039.7	1.927	-0.000	0.000	-0.014	$\langle 939 R^1, b^0, s_{\text{sym}}^0, s_{\text{asym}}^1, t^0, s_X^0 \rangle$	47.50%	0.000	0.000	-0.016
					$\langle 939 R^2, b^1, s_{\text{sym}}^0, s_{\text{asym}}^0, t^0, s_X^0 \rangle$	11.58%	0.000	0.000	0.000
					$\langle 939 R^0, b^0, s_{\text{sym}}^1, s_{\text{asym}}^1, t^0, s_X^0 \rangle$	0.09%	0.000	0.000	0.003
					$\langle 939 R^0, b^0, s_{\text{sym}}^0, s_{\text{asym}}^1, t^0, s_X^0 \rangle$	0.00%	0.000	0.000	0.003
4097.9	0.554	0.006	-0.004	-0.000	$\langle 982 R^1, b^2, s_{\text{sym}}^0, s_{\text{asym}}^0, t^0, s_X^0 \rangle$	26.05%	0.003	0.001	0.000
					$\langle 982 R^1, b^0, s_{\text{sym}}^1, s_{\text{asym}}^0, t^0, s_X^0 \rangle$	22.28%	-0.007	-0.007	0.000
					$\langle 982 R^3, b^1, s_{\text{sym}}^0, s_{\text{asym}}^0, t^0, s_X^0 \rangle$	9.27%	0.003	0.001	0.000
					$\langle 982 R^1, b^0, s_{\text{sym}}^0, s_{\text{asym}}^1, t^1, s_X^0 \rangle$	6.35%	0.001	0.000	0.000
					$\langle 982 R^0, b^0, s_{\text{sym}}^1, s_{\text{asym}}^0, t^0, s_X^0 \rangle$	0.02%	0.000	0.004	0.000
					$\langle 982 R^1, b^0, s_{\text{sym}}^0, s_{\text{asym}}^0, t^0, s_X^0 \rangle$	0.01%	0.003	0.000	0.000
4148.7	0.088	-0.002	0.002	0.000	$\langle 1030 R^4, b^0, s_{\text{sym}}^0, s_{\text{asym}}^0, t^0, s_X^0 \rangle$	60.85%	0.001	0.000	0.000
					$\langle 1030 R^2, b^0, s_{\text{sym}}^1, s_{\text{asym}}^0, t^0, s_X^0 \rangle$	0.68%	0.001	0.002	0.000
					$\langle 1030 R^1, b^0, s_{\text{sym}}^0, s_{\text{asym}}^0, t^0, s_X^0 \rangle$	0.02%	-0.004	0.000	0.000
					$\langle 1030 R^0, b^0, s_{\text{sym}}^1, s_{\text{asym}}^0, t^0, s_X^0 \rangle$	0.01%	0.000	-0.002	0.000
4166.1	0.228	-0.004	0.003	0.000	$\langle 1037 R^1, b^0, s_{\text{sym}}^0, s_{\text{asym}}^1, t^1, s_X^0 \rangle$	48.98%	0.003	0.000	0.000
					$\langle 1037 R^1, b^0, s_{\text{sym}}^1, s_{\text{asym}}^0, t^0, s_X^0 \rangle$	8.93%	0.004	0.005	0.000
					$\langle 1037 R^1, b^0, s_{\text{sym}}^1, s_{\text{asym}}^0, t^1, s_X^0 \rangle$	5.83%	-0.001	-0.002	0.000
					$\langle 1037 R^1, b^0, s_{\text{sym}}^0, s_{\text{asym}}^0, t^0, s_X^0 \rangle$	0.06%	-0.007	0.000	0.000

4216.3	0.271	-0.004	0.003	0.000	$\langle 1075 R^4, b^0, s_{\text{sym}}^0, s_{\text{asym}}^0, t^0, s_X^0 \rangle$	48.75%	0.000	0.000	0.000
					$\langle 1075 R^1, b^0, s_{\text{sym}}^0, s_{\text{asym}}^1, t^0, s_X^0 \rangle$	24.40%	0.002	0.001	0.000
					$\langle 1075 R^0, b^0, s_{\text{sym}}^1, s_{\text{asym}}^0, t^0, s_X^0 \rangle$	0.01%	0.000	0.003	0.000
					$\langle 1075 R^1, b^0, s_{\text{sym}}^0, s_{\text{asym}}^0, t^0, s_X^0 \rangle$	0.01%	-0.003	0.000	0.000
4223.3	0.070	0.002	-0.002	-0.000	$\langle 1081 R^4, b^0, s_{\text{sym}}^0, s_{\text{asym}}^0, t^1, s_X^0 \rangle$	33.56%	0.000	0.000	0.000
					$\langle 1081 R^4, b^0, s_{\text{sym}}^0, s_{\text{asym}}^0, t^2, s_X^0 \rangle$	16.29%	0.000	0.000	0.000
					$\langle 1081 R^1, b^0, s_{\text{sym}}^0, s_{\text{asym}}^1, t^0, s_X^0 \rangle$	4.88%	0.000	-0.001	0.000
					$\langle 1081 R^1, b^0, s_{\text{sym}}^0, s_{\text{asym}}^0, t^0, s_X^0 \rangle$	0.00%	0.001	0.000	0.000
4229.4	0.065	0.002	-0.002	-0.000	$\langle 1088 R^4, b^0, s_{\text{sym}}^0, s_{\text{asym}}^0, t^2, s_X^0 \rangle$	46.84%	0.000	0.000	0.000
					$\langle 1088 R^4, b^0, s_{\text{sym}}^0, s_{\text{asym}}^0, t^1, s_X^0 \rangle$	7.48%	0.000	0.000	0.000
					$\langle 1088 R^1, b^0, s_{\text{sym}}^0, s_{\text{asym}}^1, t^0, s_X^0 \rangle$	4.75%	0.000	0.000	0.000
					$\langle 1088 R^1, b^0, s_{\text{sym}}^0, s_{\text{asym}}^0, t^0, s_X^0 \rangle$	0.00%	0.001	0.000	0.000
4233.4	0.215	0.003	-0.003	-0.000	$\langle 1093 R^4, b^0, s_{\text{sym}}^0, s_{\text{asym}}^0, t^1, s_X^0 \rangle$	39.28%	0.000	0.000	0.000
					$\langle 1093 R^1, b^0, s_{\text{sym}}^0, s_{\text{asym}}^1, t^0, s_X^0 \rangle$	16.41%	-0.001	-0.002	0.000
					$\langle 1093 R^1, b^0, s_{\text{sym}}^0, s_{\text{asym}}^0, t^0, s_X^0 \rangle$	0.01%	0.003	0.000	0.000
4238.7	0.159	0.003	-0.003	-0.000	$\langle 1099 R^4, b^0, s_{\text{sym}}^0, s_{\text{asym}}^0, t^1, s_X^0 \rangle$	33.40%	0.000	0.000	0.000
					$\langle 1099 R^1, b^0, s_{\text{sym}}^0, s_{\text{asym}}^1, t^0, s_X^0 \rangle$	13.80%	-0.001	-0.001	0.000
					$\langle 1099 R^4, b^0, s_{\text{sym}}^0, s_{\text{asym}}^0, t^0, s_X^0 \rangle$	11.67%	0.000	0.000	0.000
					$\langle 1099 R^1, b^0, s_{\text{sym}}^0, s_{\text{asym}}^0, t^0, s_X^0 \rangle$	0.00%	0.002	0.000	0.000
4268.1	0.229	0.003	-0.003	0.000	$\langle 1130 R^2, b^1, s_{\text{sym}}^0, s_{\text{asym}}^0, t^0, s_X^0 \rangle$	65.71%	0.000	-0.004	0.000
					$\langle 1130 R^1, b^0, s_{\text{sym}}^0, s_{\text{asym}}^1, t^0, s_X^0 \rangle$	9.48%	-0.001	-0.003	0.000
					$\langle 1130 R^1, b^0, s_{\text{sym}}^0, s_{\text{asym}}^0, t^0, s_X^0 \rangle$	0.01%	0.002	0.000	0.000
4333.0	0.085	-0.002	0.002	-0.000	$\langle 1173 R^1, b^0, s_{\text{sym}}^1, s_{\text{asym}}^0, t^1, s_X^0 \rangle$	36.57%	0.000	0.001	0.000
					$\langle 1173 R^1, b^2, s_{\text{sym}}^0, s_{\text{asym}}^0, t^1, s_X^0 \rangle$	5.90%	0.000	0.000	0.000
					$\langle 1173 R^1, b^0, s_{\text{sym}}^1, s_{\text{asym}}^0, t^2, s_X^0 \rangle$	5.16%	0.000	0.000	0.000
					$\langle 1173 R^1, b^0, s_{\text{sym}}^0, s_{\text{asym}}^1, t^0, s_X^0 \rangle$	2.50%	0.000	0.002	0.000
					$\langle 1173 R^3, b^1, s_{\text{sym}}^0, s_{\text{asym}}^0, t^0, s_X^0 \rangle$	1.20%	0.001	0.000	0.000
					$\langle 1173 R^1, b^0, s_{\text{sym}}^0, s_{\text{asym}}^0, t^0, s_X^0 \rangle$	0.00%	-0.002	0.000	0.000
4374.2	0.065	-0.000	0.000	-0.002	$\langle 1205 R^4, b^0, s_{\text{sym}}^0, s_{\text{asym}}^0, t^1, s_X^0 \rangle$	25.35%	0.000	0.000	0.000
					$\langle 1205 R^1, b^0, s_{\text{sym}}^0, s_{\text{asym}}^1, t^0, s_X^0 \rangle$	21.74%	0.000	0.000	-0.002
					$\langle 1205 R^4, b^0, s_{\text{sym}}^0, s_{\text{asym}}^0, t^0, s_X^0 \rangle$	6.39%	0.000	0.000	0.000
					$\langle 1205 R^0, b^1, s_{\text{sym}}^0, s_{\text{asym}}^1, t^0, s_X^0 \rangle$	0.26%	0.000	0.000	-0.002
					$\langle 1205 R^0, b^0, s_{\text{sym}}^0, s_{\text{asym}}^1, t^0, s_X^0 \rangle$	0.00%	0.000	0.000	0.003
4383.5	0.111	-0.000	0.000	-0.003	$\langle 1211 R^1, b^0, s_{\text{sym}}^0, s_{\text{asym}}^1, t^0, s_X^0 \rangle$	33.91%	0.000	0.000	-0.002
					$\langle 1211 R^4, b^0, s_{\text{sym}}^0, s_{\text{asym}}^0, t^0, s_X^0 \rangle$	18.27%	0.000	0.000	0.000
					$\langle 1211 R^2, b^1, s_{\text{sym}}^0, s_{\text{asym}}^0, t^0, s_X^0 \rangle$	6.83%	0.000	0.000	0.000
					$\langle 1211 R^4, b^0, s_{\text{sym}}^0, s_{\text{asym}}^0, t^1, s_X^0 \rangle$	5.39%	0.000	0.000	0.000
					$\langle 1211 R^0, b^1, s_{\text{sym}}^0, s_{\text{asym}}^1, t^0, s_X^0 \rangle$	0.43%	0.000	0.000	-0.002
					$\langle 1211 R^0, b^0, s_{\text{sym}}^0, s_{\text{asym}}^1, t^0, s_X^0 \rangle$	0.01%	0.000	0.000	0.004
4427.4	0.157	-0.000	0.000	-0.004	$\langle 1249 R^3, b^1, s_{\text{sym}}^0, s_{\text{asym}}^0, t^0, s_X^0 \rangle$	37.99%	0.000	0.000	0.000
					$\langle 1249 R^1, b^2, s_{\text{sym}}^0, s_{\text{asym}}^0, t^0, s_X^0 \rangle$	22.29%	0.000	0.000	0.001

					$\langle 1249 R^2, b^0, s_{\text{sym}}^0, s_{\text{asym}}^1, t^0, s_X^0 \rangle$	2.91%	0.000	0.000	0.005
					$\langle 1249 R^0, b^1, s_{\text{sym}}^0, s_{\text{asym}}^1, t^0, s_X^0 \rangle$	2.01%	0.000	0.000	-0.004
					$\langle 1249 R^0, b^0, s_{\text{sym}}^0, s_{\text{asym}}^1, t^0, s_X^0 \rangle$	0.00%	0.000	0.000	-0.003
4428.7	0.066	-0.002	0.002	0.000	$\langle 1252 R^4, b^0, s_{\text{sym}}^0, s_{\text{asym}}^0, t^0, s_X^0 \rangle$	60.37%	0.000	-0.001	0.000
					$\langle 1252 R^3, b^0, s_{\text{sym}}^0, s_{\text{asym}}^0, t^0, s_X^0 \rangle$	1.51%	0.002	0.000	0.000
					$\langle 1252 R^2, b^0, s_{\text{sym}}^1, s_{\text{asym}}^0, t^0, s_X^0 \rangle$	0.58%	0.000	-0.001	0.000
					$\langle 1252 R^1, b^0, s_{\text{sym}}^0, s_{\text{asym}}^0, t^0, s_X^0 \rangle$	0.02%	-0.004	0.000	0.000
4486.7	0.098	-0.000	0.000	-0.003	$\langle 1293 R^1, b^0, s_{\text{sym}}^1, s_{\text{asym}}^0, t^0, s_X^0 \rangle$	52.72%	0.000	0.000	0.006
					$\langle 1293 R^1, b^2, s_{\text{sym}}^0, s_{\text{asym}}^0, t^0, s_X^0 \rangle$	13.62%	0.000	0.000	0.000
					$\langle 1293 R^0, b^1, s_{\text{sym}}^0, s_{\text{asym}}^1, t^0, s_X^0 \rangle$	1.73%	0.000	0.000	-0.004
					$\langle 1293 R^0, b^0, s_{\text{sym}}^0, s_{\text{asym}}^1, t^0, s_X^0 \rangle$	0.01%	0.000	0.000	-0.004
4526.2	0.753	-0.006	0.006	0.000	$\langle 1328 R^1, b^0, s_{\text{sym}}^0, s_{\text{asym}}^1, t^0, s_X^0 \rangle$	46.41%	0.000	0.007	0.000
					$\langle 1328 R^2, b^1, s_{\text{sym}}^0, s_{\text{asym}}^0, t^0, s_X^0 \rangle$	12.02%	-0.001	-0.001	0.000
					$\langle 1328 R^0, b^0, s_{\text{sym}}^1, s_{\text{asym}}^0, t^0, s_X^0 \rangle$	0.03%	0.000	-0.006	0.000
					$\langle 1328 R^1, b^0, s_{\text{sym}}^0, s_{\text{asym}}^0, t^0, s_X^0 \rangle$	0.03%	-0.005	0.000	0.000
4563.3	0.056	0.002	-0.002	0.000	$\langle 1360 R^2, b^1, s_{\text{sym}}^0, s_{\text{asym}}^0, t^2, s_X^0 \rangle$	53.32%	0.000	0.000	0.000
					$\langle 1360 R^1, b^0, s_{\text{sym}}^0, s_{\text{asym}}^1, t^2, s_X^0 \rangle$	9.35%	0.000	0.000	0.000
					$\langle 1360 R^4, b^0, s_{\text{sym}}^0, s_{\text{asym}}^0, t^2, s_X^0 \rangle$	5.89%	0.000	0.000	0.000
					$\langle 1360 R^1, b^0, s_{\text{sym}}^0, s_{\text{asym}}^1, t^0, s_X^0 \rangle$	1.74%	0.000	-0.001	0.000
					$\langle 1360 R^1, b^0, s_{\text{sym}}^0, s_{\text{asym}}^0, t^0, s_X^0 \rangle$	0.00%	0.002	0.000	0.000
					$\langle 1360 R^0, b^0, s_{\text{sym}}^1, s_{\text{asym}}^0, t^0, s_X^0 \rangle$	0.00%	0.000	0.001	0.000
4574.0	0.079	-0.000	0.000	0.003	$\langle 1370 R^1, b^2, s_{\text{sym}}^0, s_{\text{asym}}^0, t^0, s_X^0 \rangle$	26.03%	0.000	0.000	0.000
					$\langle 1370 R^1, b^0, s_{\text{sym}}^1, s_{\text{asym}}^0, t^0, s_X^0 \rangle$	15.96%	0.000	0.000	0.003
					$\langle 1370 R^2, b^1, s_{\text{sym}}^0, s_{\text{asym}}^0, t^2, s_X^0 \rangle$	12.99%	0.000	0.000	0.000
					$\langle 1370 R^3, b^1, s_{\text{sym}}^0, s_{\text{asym}}^0, t^0, s_X^0 \rangle$	7.17%	0.000	0.000	0.000
					$\langle 1370 R^0, b^1, s_{\text{sym}}^0, s_{\text{asym}}^1, t^0, s_X^0 \rangle$	4.20%	0.000	0.000	0.006
					$\langle 1370 R^2, b^0, s_{\text{sym}}^0, s_{\text{asym}}^1, t^0, s_X^0 \rangle$	1.39%	0.000	0.000	0.003
					$\langle 1370 R^0, b^0, s_{\text{sym}}^0, s_{\text{asym}}^1, t^0, s_X^0 \rangle$	0.03%	0.000	0.000	-0.008
4624.5	0.069	-0.002	0.002	-0.000	$\langle 1415 R^1, b^0, s_{\text{sym}}^1, s_{\text{asym}}^0, t^1, s_X^0 \rangle$	39.22%	0.000	-0.001	0.000
					$\langle 1415 R^1, b^2, s_{\text{sym}}^0, s_{\text{asym}}^0, t^1, s_X^0 \rangle$	8.75%	0.000	0.000	0.000
					$\langle 1415 R^1, b^0, s_{\text{sym}}^0, s_{\text{asym}}^1, t^0, s_X^0 \rangle$	2.15%	0.000	0.002	0.000
					$\langle 1415 R^1, b^0, s_{\text{sym}}^0, s_{\text{asym}}^0, t^0, s_X^0 \rangle$	0.00%	-0.002	0.000	0.000
					$\langle 1415 R^0, b^0, s_{\text{sym}}^1, s_{\text{asym}}^0, t^0, s_X^0 \rangle$	0.00%	0.000	-0.001	0.000
4672.5	0.057	-0.000	0.000	0.002	$\langle 1456 R^0, b^0, s_{\text{sym}}^0, s_{\text{asym}}^0, t^0, s_X^2 \rangle$	90.75%	0.000	0.000	-0.007
					$\langle 1456 R^0, b^0, s_{\text{sym}}^0, s_{\text{asym}}^0, t^0, s_X^1 \rangle$	1.23%	0.000	0.000	0.009
					$\langle 1456 R^0, b^0, s_{\text{sym}}^0, s_{\text{asym}}^0, t^0, s_X^3 \rangle$	1.04%	0.000	0.000	0.000
4697.0	0.339	-0.000	0.000	-0.005	$\langle 1480 R^3, b^1, s_{\text{sym}}^0, s_{\text{asym}}^0, t^0, s_X^0 \rangle$	20.06%	0.000	0.000	0.000
					$\langle 1480 R^5, b^0, s_{\text{sym}}^0, s_{\text{asym}}^0, t^0, s_X^0 \rangle$	16.58%	0.000	0.000	0.000
					$\langle 1480 R^1, b^2, s_{\text{sym}}^0, s_{\text{asym}}^0, t^0, s_X^0 \rangle$	9.47%	0.000	0.000	0.000
					$\langle 1480 R^2, b^0, s_{\text{sym}}^0, s_{\text{asym}}^1, t^0, s_X^0 \rangle$	4.20%	0.000	0.000	0.006
					$\langle 1480 R^0, b^1, s_{\text{sym}}^0, s_{\text{asym}}^1, t^0, s_X^0 \rangle$	3.60%	0.000	0.000	-0.006

					$\langle 1480 R^0, b^0, s_{\text{sym}}^0, s_{\text{asym}}^1, t^0, s_X^0 \rangle$	0.01%	0.000	0.000	-0.004
4711.6	0.106	0.001	-0.003	-0.000	$\langle 1492 R^1, b^2, s_{\text{sym}}^0, s_{\text{asym}}^0, t^1, s_X^0 \rangle$	38.37%	0.000	0.000	0.000
					$\langle 1492 R^0, b^1, s_{\text{sym}}^0, s_{\text{asym}}^1, t^1, s_X^0 \rangle$	9.61%	0.000	0.000	0.000
					$\langle 1492 R^0, b^1, s_{\text{sym}}^1, s_{\text{asym}}^0, t^0, s_X^0 \rangle$	8.16%	0.000	0.002	0.000
					$\langle 1492 R^1, b^0, s_{\text{sym}}^1, s_{\text{asym}}^0, t^1, s_X^0 \rangle$	6.97%	0.000	0.001	0.000
					$\langle 1492 R^2, b^0, s_{\text{sym}}^1, s_{\text{asym}}^0, t^0, s_X^0 \rangle$	0.85%	0.002	0.002	0.000
					$\langle 1492 R^0, b^0, s_{\text{sym}}^1, s_{\text{asym}}^0, t^0, s_X^0 \rangle$	0.03%	0.000	-0.006	0.000
4719.4	0.149	0.000	-0.000	-0.004	$\langle 1497 R^5, b^0, s_{\text{sym}}^0, s_{\text{asym}}^0, t^0, s_X^0 \rangle$	24.04%	0.000	0.000	0.000
					$\langle 1497 R^3, b^1, s_{\text{sym}}^0, s_{\text{asym}}^0, t^0, s_X^0 \rangle$	14.93%	0.000	0.000	0.000
					$\langle 1497 R^1, b^2, s_{\text{sym}}^0, s_{\text{asym}}^0, t^1, s_X^0 \rangle$	10.01%	0.000	0.000	0.000
					$\langle 1497 R^0, b^1, s_{\text{sym}}^0, s_{\text{asym}}^1, t^0, s_X^0 \rangle$	3.14%	0.000	0.000	-0.005
					$\langle 1497 R^2, b^0, s_{\text{sym}}^0, s_{\text{asym}}^1, t^0, s_X^0 \rangle$	0.07%	0.000	0.000	-0.001
					$\langle 1497 R^0, b^0, s_{\text{sym}}^0, s_{\text{asym}}^1, t^0, s_X^0 \rangle$	0.01%	0.000	0.000	0.004
4738.7	0.121	-0.001	0.003	-0.000	$\langle 1522 R^0, b^1, s_{\text{sym}}^1, s_{\text{asym}}^0, t^0, s_X^0 \rangle$	29.64%	-0.001	-0.005	0.000
					$\langle 1522 R^5, b^0, s_{\text{sym}}^0, s_{\text{asym}}^0, t^0, s_X^0 \rangle$	15.19%	0.002	0.000	0.000
					$\langle 1522 R^0, b^3, s_{\text{sym}}^0, s_{\text{asym}}^0, t^0, s_X^0 \rangle$	8.38%	0.000	-0.002	0.000
					$\langle 1522 R^2, b^0, s_{\text{sym}}^1, s_{\text{asym}}^0, t^0, s_X^0 \rangle$	6.80%	-0.005	-0.005	0.000
					$\langle 1522 R^0, b^0, s_{\text{sym}}^1, s_{\text{asym}}^0, t^0, s_X^0 \rangle$	0.15%	-0.001	0.013	0.000
4757.8	0.056	0.001	-0.002	0.000	$\langle 1542 R^5, b^0, s_{\text{sym}}^0, s_{\text{asym}}^0, t^0, s_X^0 \rangle$	34.53%	0.003	0.000	0.000
					$\langle 1542 R^0, b^1, s_{\text{sym}}^1, s_{\text{asym}}^0, t^0, s_X^0 \rangle$	18.83%	0.001	0.004	0.000
					$\langle 1542 R^3, b^1, s_{\text{sym}}^0, s_{\text{asym}}^0, t^0, s_X^0 \rangle$	6.23%	0.000	0.000	0.000
					$\langle 1542 R^3, b^0, s_{\text{sym}}^0, s_{\text{asym}}^0, t^0, s_X^0 \rangle$	1.35%	-0.004	0.000	0.000
					$\langle 1542 R^0, b^0, s_{\text{sym}}^1, s_{\text{asym}}^0, t^0, s_X^0 \rangle$	0.02%	0.000	-0.005	0.000
4778.9	0.151	0.000	-0.000	-0.004	$\langle 1565 R^1, b^0, s_{\text{sym}}^1, s_{\text{asym}}^0, t^2, s_X^0 \rangle$	33.87%	0.000	0.000	0.000
					$\langle 1565 R^1, b^2, s_{\text{sym}}^0, s_{\text{asym}}^0, t^2, s_X^0 \rangle$	7.69%	0.000	0.000	0.000
					$\langle 1565 R^2, b^1, s_{\text{sym}}^0, s_{\text{asym}}^0, t^3, s_X^0 \rangle$	5.54%	0.000	0.000	0.000
					$\langle 1565 R^0, b^1, s_{\text{sym}}^0, s_{\text{asym}}^1, t^0, s_X^0 \rangle$	3.95%	0.000	0.000	-0.006
					$\langle 1565 R^2, b^0, s_{\text{sym}}^0, s_{\text{asym}}^1, t^0, s_X^0 \rangle$	1.77%	0.000	0.000	-0.004
					$\langle 1565 R^0, b^0, s_{\text{sym}}^0, s_{\text{asym}}^1, t^0, s_X^0 \rangle$	0.01%	0.000	0.000	0.005
4785.7	1.085	0.000	-0.000	-0.010	$\langle 1575 R^0, b^1, s_{\text{sym}}^0, s_{\text{asym}}^1, t^0, s_X^0 \rangle$	28.20%	0.000	0.000	-0.016
					$\langle 1575 R^2, b^0, s_{\text{sym}}^0, s_{\text{asym}}^1, t^0, s_X^0 \rangle$	11.51%	0.000	0.000	-0.010
					$\langle 1575 R^1, b^2, s_{\text{sym}}^0, s_{\text{asym}}^0, t^0, s_X^0 \rangle$	9.24%	0.000	0.000	0.000
					$\langle 1575 R^1, b^0, s_{\text{sym}}^1, s_{\text{asym}}^0, t^2, s_X^0 \rangle$	5.20%	0.000	0.000	0.000
					$\langle 1575 R^0, b^0, s_{\text{sym}}^0, s_{\text{asym}}^1, t^0, s_X^0 \rangle$	0.06%	0.000	0.000	0.012
4787.4	0.109	0.000	-0.000	-0.003	$\langle 1577 R^1, b^0, s_{\text{sym}}^1, s_{\text{asym}}^0, t^2, s_X^0 \rangle$	52.47%	0.000	0.000	0.000
					$\langle 1577 R^1, b^2, s_{\text{sym}}^0, s_{\text{asym}}^0, t^2, s_X^0 \rangle$	6.93%	0.000	0.000	0.000
					$\langle 1577 R^0, b^1, s_{\text{sym}}^0, s_{\text{asym}}^1, t^0, s_X^0 \rangle$	3.00%	0.000	0.000	-0.005
					$\langle 1577 R^2, b^0, s_{\text{sym}}^0, s_{\text{asym}}^1, t^0, s_X^0 \rangle$	1.19%	0.000	0.000	-0.003
					$\langle 1577 R^0, b^0, s_{\text{sym}}^0, s_{\text{asym}}^1, t^0, s_X^0 \rangle$	0.01%	0.000	0.000	0.004
4871.7	0.091	0.000	-0.000	-0.003	$\langle 1664 R^4, b^0, s_{\text{sym}}^0, s_{\text{asym}}^0, t^0, s_X^0 \rangle$	70.29%	0.000	0.000	0.000
					$\langle 1664 R^0, b^1, s_{\text{sym}}^0, s_{\text{asym}}^1, t^0, s_X^0 \rangle$	1.15%	0.000	0.000	-0.003
					$\langle 1664 R^2, b^0, s_{\text{sym}}^0, s_{\text{asym}}^1, t^0, s_X^0 \rangle$	0.66%	0.000	0.000	0.002

					$\langle 1664 R^0, b^0, s_{\text{sym}}^0, s_{\text{asym}}^1, t^0, s_X^0 \rangle$	0.00%	0.000	0.000	-0.003
4885.5	0.354	0.000	-0.000	-0.005	$\langle 1681 R^1, b^0, s_{\text{sym}}^1, s_{\text{asym}}^0, t^5, s_X^0 \rangle$	22.77%	0.000	0.000	0.000
					$\langle 1681 R^1, b^2, s_{\text{sym}}^0, s_{\text{asym}}^0, t^4, s_X^0 \rangle$	12.05%	0.000	0.000	0.000
					$\langle 1681 R^2, b^0, s_{\text{sym}}^0, s_{\text{asym}}^1, t^0, s_X^0 \rangle$	5.87%	0.000	0.000	0.007
					$\langle 1681 R^0, b^1, s_{\text{sym}}^0, s_{\text{asym}}^1, t^0, s_X^0 \rangle$	2.90%	0.000	0.000	-0.005
					$\langle 1681 R^0, b^0, s_{\text{sym}}^0, s_{\text{asym}}^1, t^0, s_X^0 \rangle$	0.01%	0.000	0.000	-0.005
4886.1	0.648	-0.000	0.000	0.007	$\langle 1682 R^1, b^0, s_{\text{sym}}^1, s_{\text{asym}}^0, t^5, s_X^0 \rangle$	13.92%	0.000	0.000	0.000
					$\langle 1682 R^2, b^0, s_{\text{sym}}^0, s_{\text{asym}}^1, t^0, s_X^0 \rangle$	10.44%	0.000	0.000	-0.009
					$\langle 1682 R^1, b^2, s_{\text{sym}}^0, s_{\text{asym}}^0, t^4, s_X^0 \rangle$	7.10%	0.000	0.000	0.000
					$\langle 1682 R^1, b^2, s_{\text{sym}}^0, s_{\text{asym}}^0, t^2, s_X^0 \rangle$	5.71%	0.000	0.000	0.000
					$\langle 1682 R^0, b^1, s_{\text{sym}}^0, s_{\text{asym}}^1, t^0, s_X^0 \rangle$	5.39%	0.000	0.000	0.007
					$\langle 1682 R^0, b^0, s_{\text{sym}}^0, s_{\text{asym}}^1, t^0, s_X^0 \rangle$	0.02%	0.000	0.000	0.006
4890.8	0.268	0.000	-0.000	-0.005	$\langle 1685 R^3, b^1, s_{\text{sym}}^0, s_{\text{asym}}^0, t^2, s_X^0 \rangle$	45.03%	0.000	0.000	0.000
					$\langle 1685 R^1, b^2, s_{\text{sym}}^0, s_{\text{asym}}^0, t^2, s_X^0 \rangle$	5.26%	0.000	0.000	0.000
					$\langle 1685 R^2, b^0, s_{\text{sym}}^0, s_{\text{asym}}^1, t^0, s_X^0 \rangle$	4.34%	0.000	0.000	0.006
					$\langle 1685 R^0, b^1, s_{\text{sym}}^0, s_{\text{asym}}^1, t^0, s_X^0 \rangle$	2.38%	0.000	0.000	-0.005
					$\langle 1685 R^0, b^0, s_{\text{sym}}^0, s_{\text{asym}}^1, t^0, s_X^0 \rangle$	0.01%	0.000	0.000	-0.004
4899.3	0.053	0.000	-0.000	0.002	$\langle 1704 R^1, b^2, s_{\text{sym}}^0, s_{\text{asym}}^0, t^2, s_X^0 \rangle$	29.81%	0.000	0.000	0.000
					$\langle 1704 R^3, b^1, s_{\text{sym}}^0, s_{\text{asym}}^0, t^2, s_X^0 \rangle$	9.08%	0.000	0.000	0.000
					$\langle 1704 R^0, b^1, s_{\text{sym}}^1, s_{\text{asym}}^0, t^1, s_X^0 \rangle$	7.58%	0.000	0.000	0.000
					$\langle 1704 R^0, b^1, s_{\text{sym}}^0, s_{\text{asym}}^1, t^0, s_X^0 \rangle$	0.64%	0.000	0.000	0.002
					$\langle 1704 R^2, b^0, s_{\text{sym}}^0, s_{\text{asym}}^1, t^0, s_X^0 \rangle$	0.10%	0.000	0.000	-0.001
					$\langle 1704 R^0, b^0, s_{\text{sym}}^0, s_{\text{asym}}^1, t^1, s_X^0 \rangle$	0.00%	0.000	0.000	-0.001
4901.4	0.065	0.001	-0.002	0.000	$\langle 1707 R^0, b^3, s_{\text{sym}}^0, s_{\text{asym}}^0, t^0, s_X^0 \rangle$	23.91%	0.000	-0.003	0.000
					$\langle 1707 R^2, b^2, s_{\text{sym}}^0, s_{\text{asym}}^0, t^0, s_X^0 \rangle$	7.80%	0.000	-0.001	0.000
					$\langle 1707 R^0, b^1, s_{\text{sym}}^0, s_{\text{asym}}^1, t^1, s_X^0 \rangle$	5.43%	0.000	0.000	0.000
					$\langle 1707 R^1, b^2, s_{\text{sym}}^0, s_{\text{asym}}^0, t^1, s_X^0 \rangle$	5.26%	0.000	0.000	0.000
					$\langle 1707 R^2, b^0, s_{\text{sym}}^1, s_{\text{asym}}^0, t^0, s_X^0 \rangle$	5.15%	0.004	0.005	0.000
					$\langle 1707 R^0, b^0, s_{\text{sym}}^1, s_{\text{asym}}^0, t^0, s_X^0 \rangle$	0.04%	0.000	-0.006	0.000
					$\langle 1707 R^1, b^0, s_{\text{sym}}^0, s_{\text{asym}}^0, t^0, s_X^0 \rangle$	0.01%	-0.003	0.000	0.000
4904.3	0.246	0.000	-0.000	-0.004	$\langle 1712 R^1, b^0, s_{\text{sym}}^1, s_{\text{asym}}^0, t^5, s_X^0 \rangle$	17.52%	0.000	0.000	0.000
					$\langle 1712 R^1, b^0, s_{\text{sym}}^0, s_{\text{asym}}^1, t^4, s_X^0 \rangle$	14.70%	0.000	0.000	0.000
					$\langle 1712 R^1, b^2, s_{\text{sym}}^0, s_{\text{asym}}^0, t^2, s_X^0 \rangle$	6.08%	0.000	0.000	0.000
					$\langle 1712 R^1, b^0, s_{\text{sym}}^0, s_{\text{asym}}^1, t^5, s_X^0 \rangle$	5.49%	0.000	0.000	0.000
					$\langle 1712 R^0, b^1, s_{\text{sym}}^0, s_{\text{asym}}^1, t^0, s_X^0 \rangle$	2.72%	0.000	0.000	-0.005
					$\langle 1712 R^2, b^0, s_{\text{sym}}^0, s_{\text{asym}}^1, t^0, s_X^0 \rangle$	1.29%	0.000	0.000	0.003
					$\langle 1712 R^0, b^0, s_{\text{sym}}^0, s_{\text{asym}}^1, t^0, s_X^0 \rangle$	0.00%	0.000	0.000	-0.002
4905.1	0.613	-0.000	0.000	0.007	$\langle 1713 R^1, b^2, s_{\text{sym}}^0, s_{\text{asym}}^0, t^2, s_X^0 \rangle$	18.59%	0.000	0.000	0.000
					$\langle 1713 R^0, b^1, s_{\text{sym}}^1, s_{\text{asym}}^0, t^1, s_X^0 \rangle$	8.02%	0.000	0.000	0.000
					$\langle 1713 R^1, b^0, s_{\text{sym}}^1, s_{\text{asym}}^0, t^5, s_X^0 \rangle$	7.48%	0.000	0.000	0.000
					$\langle 1713 R^0, b^1, s_{\text{sym}}^0, s_{\text{asym}}^1, t^0, s_X^0 \rangle$	6.75%	0.000	0.000	0.008
					$\langle 1713 R^2, b^0, s_{\text{sym}}^0, s_{\text{asym}}^1, t^0, s_X^0 \rangle$	3.07%	0.000	0.000	-0.005

					$\langle 1713 R^0, b^0, s_{\text{sym}}^0, s_{\text{asym}}^1, t^0, s_X^0 \rangle$	0.00%	0.000	0.000	0.003
4917.0	0.083	-0.000	0.000	0.003	$\langle 1726 R^3, b^1, s_{\text{sym}}^0, s_{\text{asym}}^0, t^1, s_X^0 \rangle$	43.81%	0.000	0.000	0.000
					$\langle 1726 R^2, b^0, s_{\text{sym}}^0, s_{\text{asym}}^1, t^1, s_X^0 \rangle$	13.53%	0.000	0.000	-0.001
					$\langle 1726 R^1, b^2, s_{\text{sym}}^0, s_{\text{asym}}^0, t^1, s_X^0 \rangle$	7.15%	0.000	0.000	0.000
					$\langle 1726 R^2, b^0, s_{\text{sym}}^0, s_{\text{asym}}^1, t^0, s_X^0 \rangle$	0.58%	0.000	0.000	-0.002
					$\langle 1726 R^0, b^1, s_{\text{sym}}^0, s_{\text{asym}}^1, t^0, s_X^0 \rangle$	0.57%	0.000	0.000	0.002
					$\langle 1726 R^0, b^0, s_{\text{sym}}^0, s_{\text{asym}}^1, t^0, s_X^0 \rangle$	0.00%	0.000	0.000	0.003
4940.2	0.218	0.000	-0.000	-0.004	$\langle 1764 R^0, b^1, s_{\text{sym}}^0, s_{\text{asym}}^1, t^1, s_X^0 \rangle$	31.45%	0.000	0.000	0.000
					$\langle 1764 R^1, b^2, s_{\text{sym}}^0, s_{\text{asym}}^0, t^1, s_X^0 \rangle$	8.61%	0.000	0.000	0.000
					$\langle 1764 R^0, b^1, s_{\text{sym}}^0, s_{\text{asym}}^1, t^0, s_X^0 \rangle$	1.69%	0.000	0.000	-0.004
					$\langle 1764 R^2, b^0, s_{\text{sym}}^0, s_{\text{asym}}^1, t^0, s_X^0 \rangle$	0.52%	0.000	0.000	0.002
					$\langle 1764 R^0, b^0, s_{\text{sym}}^0, s_{\text{asym}}^1, t^0, s_X^0 \rangle$	0.00%	0.000	0.000	-0.002
4987.6	0.078	0.000	0.000	-0.003	$\langle 1810 R^5, b^0, s_{\text{sym}}^0, s_{\text{asym}}^0, t^0, s_X^0 \rangle$	44.89%	0.000	0.000	0.000
					$\langle 1810 R^3, b^1, s_{\text{sym}}^0, s_{\text{asym}}^0, t^0, s_X^0 \rangle$	13.85%	0.000	0.000	0.000
					$\langle 1810 R^2, b^0, s_{\text{sym}}^0, s_{\text{asym}}^1, t^0, s_X^0 \rangle$	2.77%	0.000	0.000	0.005
					$\langle 1810 R^0, b^0, s_{\text{sym}}^1, s_{\text{asym}}^1, t^0, s_X^0 \rangle$	0.06%	0.000	0.000	-0.002
					$\langle 1810 R^0, b^0, s_{\text{sym}}^0, s_{\text{asym}}^1, t^0, s_X^0 \rangle$	0.00%	0.000	0.000	-0.002
4993.4	0.075	-0.000	-0.000	-0.002	$\langle 1816 R^5, b^0, s_{\text{sym}}^0, s_{\text{asym}}^0, t^1, s_X^0 \rangle$	52.18%	0.000	0.000	0.000
					$\langle 1816 R^2, b^0, s_{\text{sym}}^1, s_{\text{asym}}^0, t^1, s_X^0 \rangle$	13.57%	0.000	0.000	0.003
					$\langle 1816 R^2, b^0, s_{\text{sym}}^0, s_{\text{asym}}^1, t^0, s_X^0 \rangle$	1.45%	0.000	0.000	0.003
					$\langle 1816 R^0, b^0, s_{\text{sym}}^0, s_{\text{asym}}^0, t^1, s_X^0 \rangle$	0.01%	0.000	0.000	-0.003
5504.7	0.242	0.000	-0.000	-0.004	$\langle 2491 R^0, b^0, s_{\text{sym}}^1, s_{\text{asym}}^0, t^0, s_X^1 \rangle$	57.33%	0.000	0.000	-0.006
					$\langle 2491 R^0, b^2, s_{\text{sym}}^0, s_{\text{asym}}^0, t^0, s_X^1 \rangle$	8.43%	0.000	0.000	0.000
					$\langle 2491 R^1, b^1, s_{\text{sym}}^0, s_{\text{asym}}^0, t^3, s_X^1 \rangle$	6.75%	0.000	0.000	0.000
					$\langle 2491 R^0, b^0, s_{\text{sym}}^0, s_{\text{asym}}^0, t^0, s_X^1 \rangle$	0.05%	0.000	0.000	0.002
					$\langle 2491 R^0, b^0, s_{\text{sym}}^0, s_{\text{asym}}^1, t^0, s_X^0 \rangle$	0.00%	0.000	0.000	0.002
5504.9	0.057	0.000	-0.000	-0.002	$\langle 2492 R^1, b^1, s_{\text{sym}}^0, s_{\text{asym}}^0, t^3, s_X^1 \rangle$	64.53%	0.000	0.000	0.000
					$\langle 2492 R^0, b^0, s_{\text{sym}}^1, s_{\text{asym}}^0, t^0, s_X^1 \rangle$	10.70%	0.000	0.000	-0.003
					$\langle 2492 R^0, b^0, s_{\text{sym}}^0, s_{\text{asym}}^0, t^0, s_X^1 \rangle$	0.01%	0.000	0.000	0.001
					$\langle 2492 R^0, b^0, s_{\text{sym}}^0, s_{\text{asym}}^1, t^0, s_X^0 \rangle$	0.00%	0.000	0.000	0.001
5510.7	0.078	0.000	-0.002	-0.000	$\langle 2502 R^0, b^0, s_{\text{sym}}^1, s_{\text{asym}}^0, t^0, s_X^1 \rangle$	48.98%	0.001	-0.012	0.000
					$\langle 2502 R^3, b^0, s_{\text{sym}}^0, s_{\text{asym}}^0, t^2, s_X^1 \rangle$	12.68%	0.000	0.000	0.000
					$\langle 2502 R^0, b^2, s_{\text{sym}}^0, s_{\text{asym}}^0, t^0, s_X^1 \rangle$	7.47%	0.000	0.000	0.000
					$\langle 2502 R^0, b^0, s_{\text{sym}}^1, s_{\text{asym}}^0, t^0, s_X^0 \rangle$	0.07%	-0.001	0.009	0.000
					$\langle 2502 R^0, b^0, s_{\text{sym}}^0, s_{\text{asym}}^0, t^0, s_X^1 \rangle$	0.04%	0.000	0.001	0.000
5529.2	0.079	0.000	-0.002	0.000	$\langle 2532 R^0, b^0, s_{\text{sym}}^0, s_{\text{asym}}^1, t^0, s_X^1 \rangle$	23.87%	0.000	-0.002	0.000
					$\langle 2532 R^1, b^1, s_{\text{sym}}^0, s_{\text{asym}}^0, t^3, s_X^1 \rangle$	18.81%	0.000	0.000	0.000
					$\langle 2532 R^3, b^0, s_{\text{sym}}^0, s_{\text{asym}}^0, t^1, s_X^1 \rangle$	17.41%	0.000	0.000	0.000
					$\langle 2532 R^0, b^0, s_{\text{sym}}^0, s_{\text{asym}}^2, t^0, s_X^0 \rangle$	0.01%	0.000	-0.001	0.000
					$\langle 2532 R^0, b^0, s_{\text{sym}}^1, s_{\text{asym}}^0, t^0, s_X^0 \rangle$	0.00%	0.000	0.002	0.000
5532.4	0.136	0.000	0.000	-0.003	$\langle 2537 R^3, b^0, s_{\text{sym}}^0, s_{\text{asym}}^0, t^1, s_X^1 \rangle$	41.12%	0.000	0.000	0.000
					$\langle 2537 R^0, b^0, s_{\text{sym}}^0, s_{\text{asym}}^1, t^0, s_X^1 \rangle$	15.08%	0.000	0.000	-0.011

					$\langle 2537 R^0, b^0, s_{\text{sym}}^1, s_{\text{asym}}^1, t^0, s_X^1 \rangle$	0.93%	0.000	0.000	-0.001
					$\langle 2537 R^0, b^0, s_{\text{sym}}^0, s_{\text{asym}}^1, t^0, s_X^0 \rangle$	0.02%	0.000	0.000	0.008
5532.5	0.074	-0.000	0.002	-0.000	$\langle 2538 R^3, b^0, s_{\text{sym}}^0, s_{\text{asym}}^0, t^1, s_X^1 \rangle$	41.85%	0.000	0.000	0.000
					$\langle 2538 R^0, b^0, s_{\text{sym}}^0, s_{\text{asym}}^1, t^0, s_X^1 \rangle$	22.82%	0.000	0.002	0.000
					$\langle 2538 R^0, b^0, s_{\text{sym}}^1, s_{\text{asym}}^0, t^0, s_X^0 \rangle$	0.00%	0.000	-0.001	0.000
					$\langle 2538 R^1, b^0, s_{\text{sym}}^0, s_{\text{asym}}^0, t^0, s_X^0 \rangle$	0.00%	0.000	0.000	0.000
5536.0	0.362	-0.000	0.000	-0.005	$\langle 2539 R^0, b^0, s_{\text{sym}}^0, s_{\text{asym}}^1, t^0, s_X^1 \rangle$	42.07%	0.000	0.000	-0.018
					$\langle 2539 R^3, b^0, s_{\text{sym}}^0, s_{\text{asym}}^0, t^1, s_X^1 \rangle$	19.61%	0.000	0.000	0.000
					$\langle 2539 R^1, b^1, s_{\text{sym}}^0, s_{\text{asym}}^0, t^0, s_X^1 \rangle$	7.09%	0.000	0.000	0.000
					$\langle 2539 R^0, b^0, s_{\text{sym}}^1, s_{\text{asym}}^1, t^0, s_X^1 \rangle$	2.53%	0.000	0.000	-0.001
					$\langle 2539 R^0, b^0, s_{\text{sym}}^0, s_{\text{asym}}^1, t^0, s_X^0 \rangle$	0.07%	0.000	0.000	0.013
6029.7	0.827	0.000	-0.000	-0.007	$\langle 3337 R^1, b^1, s_{\text{sym}}^1, s_{\text{asym}}^0, t^0, s_X^0 \rangle$	16.18%	0.000	0.000	0.000
					$\langle 3337 R^0, b^0, s_{\text{sym}}^1, s_{\text{asym}}^1, t^0, s_X^0 \rangle$	15.16%	0.000	0.000	0.037
					$\langle 3337 R^0, b^0, s_{\text{sym}}^0, s_{\text{asym}}^1, t^0, s_X^0 \rangle$	1.27%	0.000	0.000	-0.055
					$\langle 3337 R^0, b^0, s_{\text{sym}}^1, s_{\text{asym}}^3, t^0, s_X^0 \rangle$	0.49%	0.000	0.000	0.003
6035.2	0.114	-0.000	0.000	0.003	$\langle 3347 R^2, b^0, s_{\text{sym}}^0, s_{\text{asym}}^1, t^1, s_X^0 \rangle$	44.60%	0.000	0.000	0.000
					$\langle 3347 R^3, b^1, s_{\text{sym}}^0, s_{\text{asym}}^0, t^1, s_X^0 \rangle$	5.93%	0.000	0.000	0.000
					$\langle 3347 R^0, b^0, s_{\text{sym}}^1, s_{\text{asym}}^1, t^0, s_X^0 \rangle$	2.42%	0.000	0.000	-0.015
					$\langle 3347 R^2, b^0, s_{\text{sym}}^0, s_{\text{asym}}^1, t^0, s_X^0 \rangle$	0.27%	0.000	0.000	-0.002
					$\langle 3347 R^0, b^0, s_{\text{sym}}^0, s_{\text{asym}}^1, t^0, s_X^0 \rangle$	0.20%	0.000	0.000	0.022
6057.4	0.077	-0.001	0.002	-0.000	$\langle 3387 R^2, b^2, s_{\text{sym}}^0, s_{\text{asym}}^0, t^2, s_X^0 \rangle$	58.12%	0.000	0.000	0.000
					$\langle 3387 R^0, b^0, s_{\text{sym}}^0, s_{\text{asym}}^2, t^0, s_X^0 \rangle$	1.66%	0.000	-0.005	0.000
					$\langle 3387 R^0, b^0, s_{\text{sym}}^1, s_{\text{asym}}^2, t^0, s_X^0 \rangle$	0.64%	0.000	-0.002	0.000
					$\langle 3387 R^0, b^0, s_{\text{sym}}^1, s_{\text{asym}}^0, t^0, s_X^0 \rangle$	0.11%	-0.001	0.011	0.000
6058.0	0.465	0.002	-0.005	0.000	$\langle 3388 R^2, b^1, s_{\text{sym}}^0, s_{\text{asym}}^0, t^0, s_X^1 \rangle$	12.04%	0.000	0.000	0.000
					$\langle 3388 R^0, b^0, s_{\text{sym}}^0, s_{\text{asym}}^2, t^0, s_X^0 \rangle$	10.06%	-0.001	0.013	0.000
					$\langle 3388 R^1, b^1, s_{\text{sym}}^0, s_{\text{asym}}^1, t^0, s_X^0 \rangle$	8.14%	0.000	0.000	0.000
					$\langle 3388 R^2, b^2, s_{\text{sym}}^0, s_{\text{asym}}^0, t^2, s_X^0 \rangle$	6.83%	0.000	0.000	0.000
					$\langle 3388 R^0, b^0, s_{\text{sym}}^2, s_{\text{asym}}^0, t^0, s_X^0 \rangle$	6.06%	0.000	0.000	0.000
					$\langle 3388 R^0, b^0, s_{\text{sym}}^1, s_{\text{asym}}^2, t^0, s_X^0 \rangle$	3.89%	-0.001	0.004	0.000
					$\langle 3388 R^0, b^0, s_{\text{sym}}^1, s_{\text{asym}}^0, t^0, s_X^0 \rangle$	0.69%	0.002	-0.027	0.000
6058.2	0.102	0.001	-0.002	0.000	$\langle 3389 R^2, b^1, s_{\text{sym}}^0, s_{\text{asym}}^0, t^0, s_X^1 \rangle$	54.36%	0.000	0.000	0.000
					$\langle 3389 R^0, b^0, s_{\text{sym}}^0, s_{\text{asym}}^2, t^0, s_X^0 \rangle$	2.21%	-0.001	0.006	0.000
					$\langle 3389 R^0, b^0, s_{\text{sym}}^1, s_{\text{asym}}^2, t^0, s_X^0 \rangle$	0.85%	0.000	0.002	0.000
					$\langle 3389 R^0, b^0, s_{\text{sym}}^1, s_{\text{asym}}^0, t^0, s_X^0 \rangle$	0.15%	0.001	-0.013	0.000
6072.0	0.058	0.000	-0.000	0.002	$\langle 3405 R^4, b^1, s_{\text{sym}}^0, s_{\text{asym}}^0, t^1, s_X^0 \rangle$	28.63%	0.000	0.000	0.000
					$\langle 3405 R^2, b^2, s_{\text{sym}}^0, s_{\text{asym}}^0, t^1, s_X^0 \rangle$	5.83%	0.000	0.000	0.000
					$\langle 3405 R^0, b^0, s_{\text{sym}}^1, s_{\text{asym}}^1, t^0, s_X^0 \rangle$	1.20%	0.000	0.000	-0.010
					$\langle 3405 R^2, b^0, s_{\text{sym}}^0, s_{\text{asym}}^1, t^0, s_X^0 \rangle$	0.18%	0.000	0.000	0.001
					$\langle 3405 R^0, b^0, s_{\text{sym}}^0, s_{\text{asym}}^1, t^0, s_X^0 \rangle$	0.07%	0.000	0.000	0.013
6082.7	0.068	0.000	-0.000	0.002	$\langle 3425 R^2, b^2, s_{\text{sym}}^0, s_{\text{asym}}^0, t^1, s_X^0 \rangle$	26.46%	0.000	0.000	0.000
					$\langle 3425 R^4, b^1, s_{\text{sym}}^0, s_{\text{asym}}^0, t^1, s_X^0 \rangle$	9.32%	0.000	0.000	0.000

					$\langle 3425 R^3, b^0, s_{\text{sym}}^0, s_{\text{asym}}^1, t^1, s_X^0 \rangle$	6.51%	0.000	0.000	0.000
					$\langle 3425 R^0, b^0, s_{\text{sym}}^1, s_{\text{asym}}^1, t^0, s_X^0 \rangle$	1.37%	0.000	0.000	-0.011
					$\langle 3425 R^0, b^0, s_{\text{sym}}^0, s_{\text{asym}}^2, t^1, s_X^0 \rangle$	0.39%	0.000	0.000	0.001
					$\langle 3425 R^0, b^0, s_{\text{sym}}^0, s_{\text{asym}}^1, t^0, s_X^0 \rangle$	0.09%	0.000	0.000	0.014
6089.0	0.064	0.001	-0.002	0.000	$\langle 3440 R^2, b^2, s_{\text{sym}}^0, s_{\text{asym}}^0, t^1, s_X^0 \rangle$	23.13%	0.000	0.000	0.000
					$\langle 3440 R^4, b^1, s_{\text{sym}}^0, s_{\text{asym}}^0, t^1, s_X^0 \rangle$	6.21%	0.000	0.000	0.000
					$\langle 3440 R^3, b^0, s_{\text{sym}}^0, s_{\text{asym}}^1, t^1, s_X^0 \rangle$	5.24%	0.000	0.000	0.000
					$\langle 3440 R^0, b^0, s_{\text{sym}}^0, s_{\text{asym}}^2, t^0, s_X^0 \rangle$	0.95%	0.000	0.004	0.000
					$\langle 3440 R^0, b^0, s_{\text{sym}}^1, s_{\text{asym}}^2, t^0, s_X^0 \rangle$	0.46%	0.000	0.001	0.000
					$\langle 3440 R^0, b^0, s_{\text{sym}}^1, s_{\text{asym}}^0, t^0, s_X^0 \rangle$	0.08%	0.001	-0.009	0.000
6121.9	0.785	0.000	-0.000	-0.007	$\langle 3492 R^1, b^3, s_{\text{sym}}^0, s_{\text{asym}}^0, t^1, s_X^0 \rangle$	17.07%	0.000	0.000	0.000
					$\langle 3492 R^1, b^1, s_{\text{sym}}^1, s_{\text{asym}}^0, t^0, s_X^0 \rangle$	8.48%	0.000	0.000	0.000
					$\langle 3492 R^0, b^0, s_{\text{sym}}^1, s_{\text{asym}}^1, t^0, s_X^0 \rangle$	7.62%	0.000	0.000	0.026
					$\langle 3492 R^0, b^0, s_{\text{sym}}^0, s_{\text{asym}}^1, t^0, s_X^0 \rangle$	0.84%	0.000	0.000	-0.045
					$\langle 3492 R^0, b^0, s_{\text{sym}}^1, s_{\text{asym}}^3, t^0, s_X^0 \rangle$	0.32%	0.000	0.000	0.003
6128.2	0.130	-0.000	0.000	-0.003	$\langle 3503 R^1, b^3, s_{\text{sym}}^0, s_{\text{asym}}^0, t^1, s_X^0 \rangle$	20.36%	0.000	0.000	0.000
					$\langle 3503 R^1, b^1, s_{\text{sym}}^1, s_{\text{asym}}^0, t^2, s_X^0 \rangle$	18.38%	0.000	0.000	0.000
					$\langle 3503 R^0, b^0, s_{\text{sym}}^1, s_{\text{asym}}^1, t^0, s_X^0 \rangle$	1.41%	0.000	0.000	0.011
					$\langle 3503 R^0, b^0, s_{\text{sym}}^0, s_{\text{asym}}^1, t^0, s_X^0 \rangle$	0.14%	0.000	0.000	-0.018
					$\langle 3503 R^0, b^0, s_{\text{sym}}^1, s_{\text{asym}}^3, t^0, s_X^0 \rangle$	0.05%	0.000	0.000	0.001
6132.1	0.061	-0.000	0.000	-0.002	$\langle 3513 R^1, b^1, s_{\text{sym}}^1, s_{\text{asym}}^0, t^2, s_X^0 \rangle$	16.21%	0.000	0.000	0.000
					$\langle 3513 R^3, b^0, s_{\text{sym}}^0, s_{\text{asym}}^1, t^0, s_X^0 \rangle$	9.82%	0.000	0.000	0.000
					$\langle 3513 R^0, b^0, s_{\text{sym}}^1, s_{\text{asym}}^1, t^0, s_X^0 \rangle$	0.96%	0.000	0.000	0.009
					$\langle 3513 R^0, b^0, s_{\text{sym}}^0, s_{\text{asym}}^2, t^1, s_X^0 \rangle$	0.30%	0.000	0.000	0.001
					$\langle 3513 R^0, b^0, s_{\text{sym}}^0, s_{\text{asym}}^1, t^0, s_X^0 \rangle$	0.09%	0.000	0.000	-0.014
6136.0	0.199	0.000	-0.000	0.004	$\langle 3519 R^4, b^1, s_{\text{sym}}^0, s_{\text{asym}}^0, t^1, s_X^0 \rangle$	22.01%	0.000	0.000	0.000
					$\langle 3519 R^0, b^0, s_{\text{sym}}^1, s_{\text{asym}}^1, t^0, s_X^0 \rangle$	1.98%	0.000	0.000	-0.013
					$\langle 3519 R^0, b^0, s_{\text{sym}}^0, s_{\text{asym}}^2, t^1, s_X^0 \rangle$	0.93%	0.000	0.000	-0.002
					$\langle 3519 R^0, b^0, s_{\text{sym}}^0, s_{\text{asym}}^1, t^0, s_X^0 \rangle$	0.22%	0.000	0.000	0.023
6138.3	0.199	-0.000	0.000	0.004	$\langle 3525 R^4, b^1, s_{\text{sym}}^0, s_{\text{asym}}^0, t^1, s_X^0 \rangle$	7.57%	0.000	0.000	0.000
					$\langle 3525 R^0, b^0, s_{\text{sym}}^1, s_{\text{asym}}^1, t^0, s_X^0 \rangle$	1.95%	0.000	0.000	-0.013
					$\langle 3525 R^0, b^0, s_{\text{sym}}^0, s_{\text{asym}}^2, t^1, s_X^0 \rangle$	0.80%	0.000	0.000	-0.002
					$\langle 3525 R^0, b^0, s_{\text{sym}}^0, s_{\text{asym}}^1, t^0, s_X^0 \rangle$	0.22%	0.000	0.000	0.023
6161.5	0.096	-0.001	0.002	-0.000	$\langle 3563 R^4, b^1, s_{\text{sym}}^0, s_{\text{asym}}^0, t^0, s_X^0 \rangle$	40.60%	0.000	0.000	0.000
					$\langle 3563 R^1, b^1, s_{\text{sym}}^0, s_{\text{asym}}^1, t^0, s_X^0 \rangle$	10.07%	0.000	0.000	0.000
					$\langle 3563 R^3, b^0, s_{\text{sym}}^0, s_{\text{asym}}^1, t^0, s_X^0 \rangle$	5.19%	0.000	0.000	0.000
					$\langle 3563 R^0, b^0, s_{\text{sym}}^1, s_{\text{asym}}^1, t^1, s_X^0 \rangle$	1.60%	0.000	-0.001	0.000
					$\langle 3563 R^2, b^0, s_{\text{sym}}^1, s_{\text{asym}}^0, t^0, s_X^0 \rangle$	0.11%	-0.001	-0.001	0.000
					$\langle 3563 R^0, b^0, s_{\text{sym}}^1, s_{\text{asym}}^0, t^0, s_X^0 \rangle$	0.02%	0.000	0.005	0.000
6167.7	0.128	0.001	-0.003	0.000	$\langle 3576 R^1, b^1, s_{\text{sym}}^0, s_{\text{asym}}^1, t^0, s_X^0 \rangle$	19.31%	0.000	0.000	0.000
					$\langle 3576 R^4, b^1, s_{\text{sym}}^0, s_{\text{asym}}^0, t^0, s_X^0 \rangle$	8.33%	0.000	0.000	0.000
					$\langle 3576 R^0, b^0, s_{\text{sym}}^1, s_{\text{asym}}^1, t^1, s_X^0 \rangle$	3.18%	0.000	0.002	0.000

					$\langle 3576 R^3, b^0, s_{\text{sym}}^0, s_{\text{asym}}^1, t^0, s_X^0 \rangle$	1.69%	-0.001	0.000	0.000
					$\langle 3576 R^0, b^0, s_{\text{sym}}^1, s_{\text{asym}}^0, t^0, s_X^0 \rangle$	0.03%	0.000	-0.006	0.000
6187.3	0.064	-0.001	0.002	-0.000	$\langle 3621 R^5, b^0, s_{\text{sym}}^0, s_{\text{asym}}^0, t^2, s_X^0 \rangle$	22.90%	0.000	0.000	0.000
					$\langle 3621 R^1, b^1, s_{\text{sym}}^1, s_{\text{asym}}^0, t^1, s_X^0 \rangle$	6.86%	0.000	0.000	0.000
					$\langle 3621 R^0, b^0, s_{\text{sym}}^1, s_{\text{asym}}^1, t^1, s_X^0 \rangle$	2.64%	0.000	0.002	0.000
					$\langle 3621 R^0, b^0, s_{\text{sym}}^0, s_{\text{asym}}^2, t^0, s_X^0 \rangle$	1.45%	0.000	-0.005	0.000
					$\langle 3621 R^0, b^0, s_{\text{sym}}^1, s_{\text{asym}}^0, t^0, s_X^0 \rangle$	0.08%	-0.001	0.009	0.000
6226.3	0.110	0.000	-0.000	-0.003	$\langle 3709 R^2, b^0, s_{\text{sym}}^0, s_{\text{asym}}^1, t^2, s_X^0 \rangle$	40.12%	0.000	0.000	0.000
					$\langle 3709 R^3, b^1, s_{\text{sym}}^0, s_{\text{asym}}^0, t^2, s_X^0 \rangle$	6.39%	0.000	0.000	0.000
					$\langle 3709 R^0, b^0, s_{\text{sym}}^1, s_{\text{asym}}^1, t^0, s_X^0 \rangle$	2.40%	0.000	0.000	0.015
					$\langle 3709 R^0, b^0, s_{\text{sym}}^0, s_{\text{asym}}^2, t^1, s_X^0 \rangle$	1.37%	0.000	0.000	-0.002
					$\langle 3709 R^0, b^0, s_{\text{sym}}^0, s_{\text{asym}}^1, t^0, s_X^0 \rangle$	0.15%	0.000	0.000	-0.019
6230.5	0.088	0.000	-0.000	-0.002	$\langle 3718 R^3, b^0, s_{\text{sym}}^0, s_{\text{asym}}^1, t^1, s_X^0 \rangle$	20.56%	0.000	0.000	0.000
					$\langle 3718 R^0, b^0, s_{\text{sym}}^1, s_{\text{asym}}^1, t^0, s_X^0 \rangle$	1.99%	0.000	0.000	0.013
					$\langle 3718 R^0, b^0, s_{\text{sym}}^0, s_{\text{asym}}^2, t^1, s_X^0 \rangle$	1.87%	0.000	0.000	-0.003
					$\langle 3718 R^0, b^0, s_{\text{sym}}^0, s_{\text{asym}}^1, t^0, s_X^0 \rangle$	0.10%	0.000	0.000	-0.016
6240.4	0.235	-0.000	0.000	0.004	$\langle 3743 R^1, b^1, s_{\text{sym}}^0, s_{\text{asym}}^1, t^1, s_X^0 \rangle$	6.04%	0.000	0.000	0.000
					$\langle 3743 R^0, b^0, s_{\text{sym}}^1, s_{\text{asym}}^1, t^0, s_X^0 \rangle$	5.62%	0.000	0.000	-0.022
					$\langle 3743 R^0, b^0, s_{\text{sym}}^0, s_{\text{asym}}^2, t^1, s_X^0 \rangle$	4.56%	0.000	0.000	0.004
					$\langle 3743 R^0, b^0, s_{\text{sym}}^0, s_{\text{asym}}^1, t^0, s_X^0 \rangle$	0.36%	0.000	0.000	0.029
6273.7	0.069	0.000	-0.000	0.002	$\langle 3791 R^2, b^2, s_{\text{sym}}^0, s_{\text{asym}}^0, t^2, s_X^0 \rangle$	39.71%	0.000	0.000	0.000
					$\langle 3791 R^1, b^1, s_{\text{sym}}^0, s_{\text{asym}}^1, t^2, s_X^0 \rangle$	10.90%	0.000	0.000	0.000
					$\langle 3791 R^2, b^0, s_{\text{sym}}^1, s_{\text{asym}}^0, t^2, s_X^0 \rangle$	6.01%	0.000	0.000	0.000
					$\langle 3791 R^0, b^0, s_{\text{sym}}^1, s_{\text{asym}}^1, t^0, s_X^0 \rangle$	1.62%	0.000	0.000	-0.012
					$\langle 3791 R^0, b^0, s_{\text{sym}}^0, s_{\text{asym}}^2, t^1, s_X^0 \rangle$	0.70%	0.000	0.000	0.002
					$\langle 3791 R^0, b^0, s_{\text{sym}}^0, s_{\text{asym}}^1, t^0, s_X^0 \rangle$	0.10%	0.000	0.000	0.015
6293.2	0.051	-0.001	0.002	0.000	$\langle 3817 R^1, b^1, s_{\text{sym}}^1, s_{\text{asym}}^0, t^2, s_X^0 \rangle$	17.65%	0.000	0.000	0.000
					$\langle 3817 R^0, b^0, s_{\text{sym}}^1, s_{\text{asym}}^1, t^1, s_X^0 \rangle$	6.50%	0.000	0.002	0.000
					$\langle 3817 R^0, b^2, s_{\text{sym}}^1, s_{\text{asym}}^0, t^0, s_X^0 \rangle$	5.88%	0.000	0.002	0.000
					$\langle 3817 R^0, b^0, s_{\text{sym}}^2, s_{\text{asym}}^0, t^0, s_X^0 \rangle$	5.42%	0.000	0.000	0.000
					$\langle 3817 R^0, b^0, s_{\text{sym}}^0, s_{\text{asym}}^1, t^1, s_X^0 \rangle$	0.74%	0.000	-0.001	0.000
6332.9	0.100	-0.000	0.000	-0.003	$\langle 3903 R^1, b^1, s_{\text{sym}}^0, s_{\text{asym}}^1, t^1, s_X^0 \rangle$	16.09%	0.000	0.000	0.002
					$\langle 3903 R^0, b^0, s_{\text{sym}}^2, s_{\text{asym}}^0, t^1, s_X^0 \rangle$	6.91%	0.000	0.000	-0.001
					$\langle 3903 R^0, b^0, s_{\text{sym}}^1, s_{\text{asym}}^1, t^0, s_X^0 \rangle$	2.17%	0.000	0.000	0.014
					$\langle 3903 R^0, b^0, s_{\text{sym}}^0, s_{\text{asym}}^1, t^0, s_X^0 \rangle$	0.15%	0.000	0.000	-0.019
6417.5	0.068	-0.000	-0.002	-0.000	$\langle 4090 R^0, b^0, s_{\text{sym}}^2, s_{\text{asym}}^0, t^0, s_X^0 \rangle$	13.84%	-0.001	-0.001	0.000
					$\langle 4090 R^0, b^0, s_{\text{sym}}^0, s_{\text{asym}}^2, t^0, s_X^0 \rangle$	8.89%	0.001	-0.013	0.000
					$\langle 4090 R^0, b^2, s_{\text{sym}}^1, s_{\text{asym}}^0, t^0, s_X^0 \rangle$	6.90%	0.000	0.002	0.000
					$\langle 4090 R^1, b^3, s_{\text{sym}}^0, s_{\text{asym}}^0, t^1, s_X^0 \rangle$	6.15%	0.000	0.000	0.000
					$\langle 4090 R^2, b^0, s_{\text{sym}}^1, s_{\text{asym}}^0, t^0, s_X^0 \rangle$	0.45%	0.001	0.001	0.000
					$\langle 4090 R^0, b^0, s_{\text{sym}}^1, s_{\text{asym}}^0, t^0, s_X^0 \rangle$	0.06%	-0.001	0.008	0.000

MeOH₂ ··· CO

ω	I	μ_x	μ_y	μ_z	Assignment	$ c_n ^2$	$\mu_x^{g \rightarrow n}$	$\mu_y^{g \rightarrow n}$	$\mu_z^{g \rightarrow n}$
4131.3	0.139	-0.001	-0.003	-0.001	$\langle 292 R^1, b^2, s_{\text{HB}}^0, s_{\text{free}}^0, t^0, s_X^0 \rangle$	42.65%	0.001	-0.001	0.003
					$\langle 292 R^0, b^1, s_{\text{HB}}^1, s_{\text{free}}^0, t^0, s_X^0 \rangle$	11.29%	-0.008	0.000	0.002
					$\langle 292 R^1, b^0, s_{\text{HB}}^0, s_{\text{free}}^0, t^0, s_X^0 \rangle$	0.02%	-0.001	0.002	-0.003
					$\langle 292 R^0, b^0, s_{\text{HB}}^1, s_{\text{free}}^0, t^0, s_X^0 \rangle$	0.01%	0.005	0.001	0.000
4168.5	0.074	0.001	-0.002	-0.001	$\langle 297 R^4, b^0, s_{\text{HB}}^0, s_{\text{free}}^0, t^1, s_X^0 \rangle$	13.15%	0.000	0.000	0.000
					$\langle 297 R^1, b^2, s_{\text{HB}}^0, s_{\text{free}}^0, t^0, s_X^0 \rangle$	5.92%	0.000	0.000	-0.001
					$\langle 297 R^0, b^1, s_{\text{HB}}^1, s_{\text{free}}^0, t^0, s_X^0 \rangle$	3.79%	-0.005	0.000	0.001
					$\langle 297 R^1, b^0, s_{\text{HB}}^1, s_{\text{free}}^0, t^0, s_X^0 \rangle$	0.35%	0.002	0.000	0.000
4174.5	0.061	0.001	0.002	0.001	$\langle 299 R^4, b^0, s_{\text{HB}}^0, s_{\text{free}}^0, t^1, s_X^0 \rangle$	13.07%	0.000	0.000	0.000
					$\langle 299 R^0, b^1, s_{\text{HB}}^0, s_{\text{free}}^0, t^2, s_X^1 \rangle$	9.90%	0.000	0.000	0.000
					$\langle 299 R^2, b^1, s_{\text{HB}}^0, s_{\text{free}}^0, t^3, s_X^0 \rangle$	6.18%	0.000	0.000	0.000
					$\langle 299 R^0, b^1, s_{\text{HB}}^1, s_{\text{free}}^0, t^0, s_X^0 \rangle$	3.21%	0.004	0.000	-0.001
4195.2	0.234	-0.001	-0.004	-0.003	$\langle 304 R^2, b^1, s_{\text{HB}}^0, s_{\text{free}}^0, t^1, s_X^0 \rangle$	22.23%	0.000	0.000	0.000
					$\langle 304 R^0, b^1, s_{\text{HB}}^1, s_{\text{free}}^0, t^0, s_X^0 \rangle$	17.79%	-0.010	0.000	0.002
					$\langle 304 R^1, b^2, s_{\text{HB}}^0, s_{\text{free}}^0, t^0, s_X^0 \rangle$	12.82%	0.000	0.000	-0.001
					$\langle 304 R^0, b^0, s_{\text{HB}}^1, s_{\text{free}}^0, t^0, s_X^0 \rangle$	0.04%	0.011	0.001	0.000
4287.7	0.058	-0.002	-0.000	-0.001	$\langle 325 R^2, b^1, s_{\text{HB}}^0, s_{\text{free}}^0, t^0, s_X^0 \rangle$	29.76%	-0.001	0.002	0.001
					$\langle 325 R^2, b^1, s_{\text{HB}}^0, s_{\text{free}}^0, t^3, s_X^0 \rangle$	10.61%	0.000	0.000	0.000
					$\langle 325 R^0, b^1, s_{\text{HB}}^1, s_{\text{free}}^0, t^0, s_X^0 \rangle$	0.37%	-0.001	0.000	0.000
					$\langle 325 R^0, b^1, s_{\text{HB}}^0, s_{\text{free}}^0, t^0, s_X^0 \rangle$	0.04%	0.001	-0.002	-0.001
4384.7	0.055	-0.001	0.002	0.001	$\langle 352 R^3, b^1, s_{\text{HB}}^0, s_{\text{free}}^0, t^0, s_X^0 \rangle$	25.09%	0.001	-0.001	0.002
					$\langle 352 R^0, b^1, s_{\text{HB}}^1, s_{\text{free}}^0, t^0, s_X^0 \rangle$	4.70%	0.005	0.000	-0.001
					$\langle 352 R^0, b^0, s_{\text{HB}}^2, s_{\text{free}}^0, t^0, s_X^0 \rangle$	0.15%	-0.003	0.000	0.000
					$\langle 352 R^0, b^0, s_{\text{HB}}^1, s_{\text{free}}^0, t^0, s_X^0 \rangle$	0.01%	0.005	0.001	0.000
4406.2	0.361	-0.004	-0.004	-0.002	$\langle 357 R^1, b^2, s_{\text{HB}}^0, s_{\text{free}}^0, t^0, s_X^0 \rangle$	15.43%	0.000	0.000	0.000
					$\langle 357 R^0, b^1, s_{\text{HB}}^1, s_{\text{free}}^0, t^0, s_X^0 \rangle$	12.17%	-0.008	0.000	0.002
					$\langle 357 R^3, b^1, s_{\text{HB}}^0, s_{\text{free}}^0, t^0, s_X^0 \rangle$	9.25%	0.000	-0.001	0.001
					$\langle 357 R^2, b^0, s_{\text{HB}}^1, s_{\text{free}}^0, t^0, s_X^0 \rangle$	5.70%	-0.004	-0.002	0.002
					$\langle 357 R^0, b^0, s_{\text{HB}}^2, s_{\text{free}}^0, t^0, s_X^0 \rangle$	0.41%	-0.005	0.000	0.000
					$\langle 357 R^0, b^0, s_{\text{HB}}^1, s_{\text{free}}^0, t^0, s_X^0 \rangle$	0.14%	0.020	0.002	-0.001

4422.6	0.053	-0.002	0.001	0.000	$\langle 359 R^4, b^0, s_{\text{HB}}^0, s_{\text{free}}^0, t^1, s_X^0 \rangle$	45.16%	0.000	0.000	0.000
					$\langle 359 R^0, b^1, s_{\text{HB}}^1, s_{\text{free}}^0, t^0, s_X^0 \rangle$	0.52%	0.002	0.000	0.000
					$\langle 359 R^0, b^0, s_{\text{HB}}^2, s_{\text{free}}^0, t^0, s_X^0 \rangle$	0.09%	-0.002	0.000	0.000
					$\langle 359 R^0, b^0, s_{\text{HB}}^0, s_{\text{free}}^0, t^1, s_X^0 \rangle$	0.01%	-0.002	0.000	0.000
4434.2	0.281	0.005	0.001	0.000	$\langle 363 R^0, b^0, s_{\text{HB}}^0, s_{\text{free}}^0, t^0, s_X^2 \rangle$	94.34%	0.005	0.001	0.000
					$\langle 363 R^2, b^0, s_{\text{HB}}^0, s_{\text{free}}^0, t^0, s_X^1 \rangle$	1.54%	0.000	0.000	0.000
					$\langle 363 R^0, b^0, s_{\text{HB}}^0, s_{\text{free}}^0, t^1, s_X^0 \rangle$	0.00%	0.000	0.000	0.000
4439.5	1.563	0.004	-0.011	-0.000	$\langle 367 R^1, b^0, s_{\text{HB}}^0, s_{\text{free}}^1, t^0, s_X^0 \rangle$	75.25%	-0.005	0.003	-0.015
					$\langle 367 R^1, b^0, s_{\text{HB}}^0, s_{\text{free}}^0, t^0, s_X^0 \rangle$	0.62%	0.006	-0.011	0.017
					$\langle 367 R^0, b^0, s_{\text{HB}}^1, s_{\text{free}}^0, t^0, s_X^0 \rangle$	0.01%	-0.004	0.000	0.000
4458.8	0.181	0.004	-0.001	-0.000	$\langle 372 R^2, b^0, s_{\text{HB}}^1, s_{\text{free}}^0, t^0, s_X^0 \rangle$	13.24%	0.006	0.002	-0.004
					$\langle 372 R^3, b^1, s_{\text{HB}}^0, s_{\text{free}}^0, t^0, s_X^0 \rangle$	10.67%	0.000	-0.001	0.002
					$\langle 372 R^0, b^0, s_{\text{HB}}^2, s_{\text{free}}^0, t^0, s_X^0 \rangle$	0.87%	0.008	0.000	0.000
					$\langle 372 R^0, b^0, s_{\text{HB}}^1, s_{\text{free}}^0, t^0, s_X^0 \rangle$	0.16%	-0.022	-0.002	0.001
4539.6	0.108	0.003	0.000	0.000	$\langle 392 R^4, b^0, s_{\text{HB}}^0, s_{\text{free}}^0, t^2, s_X^0 \rangle$	25.58%	0.000	0.000	0.000
					$\langle 392 R^2, b^1, s_{\text{HB}}^0, s_{\text{free}}^0, t^4, s_X^0 \rangle$	6.22%	0.000	0.000	0.000
					$\langle 392 R^2, b^0, s_{\text{HB}}^1, s_{\text{free}}^0, t^0, s_X^0 \rangle$	0.83%	0.001	0.001	-0.001
					$\langle 392 R^0, b^0, s_{\text{HB}}^2, s_{\text{free}}^0, t^0, s_X^0 \rangle$	0.36%	0.005	0.000	0.000
					$\langle 392 R^0, b^0, s_{\text{HB}}^1, s_{\text{free}}^0, t^0, s_X^0 \rangle$	0.00%	-0.003	0.000	0.000
4543.4	0.124	0.003	-0.000	0.000	$\langle 393 R^3, b^1, s_{\text{HB}}^0, s_{\text{free}}^0, t^0, s_X^0 \rangle$	20.63%	0.000	0.000	-0.001
					$\langle 393 R^4, b^0, s_{\text{HB}}^0, s_{\text{free}}^0, t^1, s_X^0 \rangle$	6.12%	0.000	0.000	0.000
					$\langle 393 R^2, b^0, s_{\text{HB}}^1, s_{\text{free}}^0, t^0, s_X^0 \rangle$	4.54%	0.003	0.001	-0.002
					$\langle 393 R^0, b^0, s_{\text{HB}}^2, s_{\text{free}}^0, t^0, s_X^0 \rangle$	0.50%	0.006	0.000	0.000
					$\langle 393 R^0, b^0, s_{\text{HB}}^1, s_{\text{free}}^0, t^0, s_X^0 \rangle$	0.04%	-0.012	-0.001	0.000
4547.4	0.136	0.003	0.000	0.000	$\langle 394 R^4, b^0, s_{\text{HB}}^0, s_{\text{free}}^0, t^1, s_X^0 \rangle$	24.26%	0.000	0.000	0.000
					$\langle 394 R^0, b^1, s_{\text{HB}}^0, s_{\text{free}}^0, t^4, s_X^1 \rangle$	11.59%	0.000	0.000	0.000
					$\langle 394 R^2, b^0, s_{\text{HB}}^1, s_{\text{free}}^0, t^0, s_X^0 \rangle$	1.88%	0.002	0.001	-0.001
					$\langle 394 R^0, b^0, s_{\text{HB}}^2, s_{\text{free}}^0, t^0, s_X^0 \rangle$	0.55%	0.006	0.000	0.000
					$\langle 394 R^0, b^0, s_{\text{HB}}^1, s_{\text{free}}^0, t^0, s_X^0 \rangle$	0.02%	-0.007	-0.001	0.000
4548.4	0.141	0.004	-0.000	0.000	$\langle 395 R^0, b^1, s_{\text{HB}}^0, s_{\text{free}}^0, t^4, s_X^1 \rangle$	40.91%	0.000	0.000	0.000
					$\langle 395 R^2, b^1, s_{\text{HB}}^0, s_{\text{free}}^0, t^4, s_X^0 \rangle$	5.89%	0.000	0.000	0.000
					$\langle 395 R^2, b^0, s_{\text{HB}}^1, s_{\text{free}}^0, t^0, s_X^0 \rangle$	2.82%	0.003	0.001	-0.002
					$\langle 395 R^0, b^0, s_{\text{HB}}^2, s_{\text{free}}^0, t^0, s_X^0 \rangle$	0.64%	0.006	0.000	0.000
					$\langle 395 R^0, b^0, s_{\text{HB}}^1, s_{\text{free}}^0, t^0, s_X^0 \rangle$	0.02%	-0.008	-0.001	0.000
4583.5	0.183	0.004	-0.000	0.000	$\langle 405 R^2, b^0, s_{\text{HB}}^1, s_{\text{free}}^0, t^0, s_X^0 \rangle$	10.31%	-0.007	0.001	-0.001
					$\langle 405 R^4, b^0, s_{\text{HB}}^0, s_{\text{free}}^0, t^3, s_X^0 \rangle$	6.10%	0.000	0.000	0.000
					$\langle 405 R^3, b^1, s_{\text{HB}}^0, s_{\text{free}}^0, t^0, s_X^0 \rangle$	5.97%	0.000	0.000	0.000
					$\langle 405 R^4, b^0, s_{\text{HB}}^0, s_{\text{free}}^0, t^2, s_X^0 \rangle$	5.95%	0.000	0.000	0.000
					$\langle 405 R^0, b^0, s_{\text{HB}}^2, s_{\text{free}}^0, t^0, s_X^0 \rangle$	0.94%	0.008	0.000	0.000
4584.3	0.103	0.003	-0.000	0.000	$\langle 406 R^4, b^0, s_{\text{HB}}^0, s_{\text{free}}^0, t^3, s_X^0 \rangle$	19.90%	0.000	0.000	0.000
					$\langle 406 R^0, b^0, s_{\text{HB}}^0, s_{\text{free}}^0, t^1, s_X^2 \rangle$	10.35%	0.000	0.000	0.000

					$\langle 406 R^4, b^0, s_{\text{HB}}^0, s_{\text{free}}^0, t^2, s_X^0 \rangle$	5.30%	0.000	0.000	0.000
					$\langle 406 R^2, b^0, s_{\text{HB}}^1, s_{\text{free}}^0, t^0, s_X^0 \rangle$	2.76%	-0.005	0.000	0.000
					$\langle 406 R^0, b^0, s_{\text{HB}}^2, s_{\text{free}}^0, t^0, s_X^0 \rangle$	0.42%	0.005	0.000	0.000
4591.9	0.067	0.002	-0.001	0.001	$\langle 409 R^1, b^0, s_{\text{HB}}^0, s_{\text{free}}^1, t^1, s_X^0 \rangle$	16.37%	-0.001	0.001	0.000
					$\langle 409 R^1, b^2, s_{\text{HB}}^0, s_{\text{free}}^0, t^0, s_X^0 \rangle$	12.94%	0.000	0.000	0.000
					$\langle 409 R^0, b^0, s_{\text{HB}}^0, s_{\text{free}}^1, t^0, s_X^0 \rangle$	0.01%	-0.001	-0.001	-0.001
					$\langle 409 R^0, b^0, s_{\text{HB}}^1, s_{\text{free}}^0, t^0, s_X^0 \rangle$	0.00%	0.003	0.000	0.000
					$\langle 409 R^1, b^0, s_{\text{HB}}^0, s_{\text{free}}^0, t^0, s_X^0 \rangle$	0.00%	0.000	-0.001	0.001
4594.2	0.118	0.003	-0.001	0.001	$\langle 410 R^1, b^0, s_{\text{HB}}^0, s_{\text{free}}^1, t^1, s_X^0 \rangle$	32.31%	-0.001	0.001	-0.001
					$\langle 410 R^1, b^0, s_{\text{HB}}^0, s_{\text{free}}^1, t^0, s_X^0 \rangle$	21.10%	0.000	0.001	0.003
					$\langle 410 R^1, b^2, s_{\text{HB}}^0, s_{\text{free}}^0, t^0, s_X^0 \rangle$	20.15%	0.000	0.000	0.000
					$\langle 410 R^0, b^0, s_{\text{HB}}^0, s_{\text{free}}^1, t^0, s_X^0 \rangle$	0.01%	-0.001	-0.001	-0.001
4601.3	0.113	0.002	-0.003	0.000	$\langle 412 R^1, b^2, s_{\text{HB}}^0, s_{\text{free}}^0, t^0, s_X^0 \rangle$	30.67%	0.000	-0.001	0.000
					$\langle 412 R^0, b^1, s_{\text{HB}}^1, s_{\text{free}}^0, t^1, s_X^0 \rangle$	8.99%	0.001	0.001	0.000
					$\langle 412 R^1, b^0, s_{\text{HB}}^0, s_{\text{free}}^1, t^0, s_X^0 \rangle$	5.31%	0.001	0.000	0.000
					$\langle 412 R^0, b^1, s_{\text{HB}}^1, s_{\text{free}}^0, t^0, s_X^0 \rangle$	3.57%	-0.005	0.000	0.001
					$\langle 412 R^0, b^1, s_{\text{HB}}^0, s_{\text{free}}^0, t^0, s_X^0 \rangle$	0.11%	0.002	-0.003	-0.002
					$\langle 412 R^0, b^0, s_{\text{HB}}^1, s_{\text{free}}^0, t^0, s_X^0 \rangle$	0.00%	0.002	0.000	0.000
4606.0	0.366	-0.005	0.001	-0.002	$\langle 414 R^1, b^0, s_{\text{HB}}^0, s_{\text{free}}^1, t^0, s_X^0 \rangle$	51.81%	-0.002	-0.002	-0.003
					$\langle 414 R^1, b^0, s_{\text{HB}}^0, s_{\text{free}}^1, t^1, s_X^0 \rangle$	27.22%	-0.001	0.001	0.000
					$\langle 414 R^0, b^0, s_{\text{HB}}^1, s_{\text{free}}^0, t^0, s_X^0 \rangle$	0.00%	-0.002	0.000	0.000
4685.8	0.058	0.002	0.000	0.000	$\langle 438 R^4, b^0, s_{\text{HB}}^0, s_{\text{free}}^0, t^1, s_X^0 \rangle$	33.91%	0.000	0.000	0.000
					$\langle 438 R^0, b^0, s_{\text{HB}}^2, s_{\text{free}}^0, t^0, s_X^0 \rangle$	0.26%	0.004	0.000	0.000
					$\langle 438 R^0, b^0, s_{\text{HB}}^1, s_{\text{free}}^0, t^0, s_X^0 \rangle$	0.00%	-0.003	0.000	0.000
					$\langle 438 R^0, b^0, s_{\text{HB}}^0, s_{\text{free}}^0, t^1, s_X^0 \rangle$	0.00%	0.001	0.000	0.000
4689.7	0.084	0.003	-0.000	0.000	$\langle 439 R^4, b^0, s_{\text{HB}}^0, s_{\text{free}}^0, t^2, s_X^0 \rangle$	43.39%	0.000	0.000	0.000
					$\langle 439 R^2, b^0, s_{\text{HB}}^1, s_{\text{free}}^0, t^0, s_X^0 \rangle$	0.66%	0.001	0.001	-0.001
					$\langle 439 R^0, b^0, s_{\text{HB}}^2, s_{\text{free}}^0, t^0, s_X^0 \rangle$	0.47%	0.006	0.000	0.000
					$\langle 439 R^0, b^0, s_{\text{HB}}^1, s_{\text{free}}^0, t^0, s_X^0 \rangle$	0.01%	-0.007	-0.001	0.000
4710.5	0.740	0.008	0.001	0.000	$\langle 443 R^3, b^1, s_{\text{HB}}^0, s_{\text{free}}^0, t^0, s_X^0 \rangle$	15.13%	0.000	0.000	0.000
					$\langle 443 R^2, b^0, s_{\text{HB}}^1, s_{\text{free}}^0, t^0, s_X^0 \rangle$	11.36%	-0.004	0.001	-0.001
					$\langle 443 R^2, b^0, s_{\text{HB}}^1, s_{\text{free}}^0, t^1, s_X^0 \rangle$	5.35%	-0.002	0.000	0.000
					$\langle 443 R^0, b^0, s_{\text{HB}}^2, s_{\text{free}}^0, t^0, s_X^0 \rangle$	1.85%	0.011	0.001	-0.001
					$\langle 443 R^0, b^0, s_{\text{HB}}^1, s_{\text{free}}^0, t^0, s_X^0 \rangle$	0.01%	0.006	0.001	0.000
4714.9	0.788	0.008	0.000	0.000	$\langle 446 R^3, b^1, s_{\text{HB}}^0, s_{\text{free}}^0, t^0, s_X^0 \rangle$	14.00%	0.000	0.000	0.000
					$\langle 446 R^2, b^0, s_{\text{HB}}^1, s_{\text{free}}^0, t^0, s_X^0 \rangle$	11.62%	0.011	0.002	0.000
					$\langle 446 R^0, b^0, s_{\text{HB}}^2, s_{\text{free}}^0, t^0, s_X^0 \rangle$	2.94%	0.014	0.001	-0.001
					$\langle 446 R^0, b^0, s_{\text{HB}}^1, s_{\text{free}}^0, t^0, s_X^0 \rangle$	0.11%	-0.018	-0.002	0.000
4720.8	0.079	-0.003	-0.000	-0.000	$\langle 447 R^4, b^0, s_{\text{HB}}^0, s_{\text{free}}^0, t^1, s_X^0 \rangle$	52.31%	0.000	0.000	0.000
					$\langle 447 R^2, b^0, s_{\text{HB}}^1, s_{\text{free}}^0, t^0, s_X^0 \rangle$	1.50%	-0.004	0.000	0.000
					$\langle 447 R^0, b^0, s_{\text{HB}}^2, s_{\text{free}}^0, t^0, s_X^0 \rangle$	0.31%	-0.005	0.000	0.000

					$\langle 447 R^0, b^0, s_{\text{HB}}^1, s_{\text{free}}^0, t^0, s_X^0 \rangle$	0.02%	0.009	0.001	0.000
4768.5	0.076	-0.001	-0.002	-0.001	$\langle 464 R^1, b^0, s_{\text{HB}}^0, s_{\text{free}}^1, t^0, s_X^0 \rangle$	42.87%	-0.001	-0.002	-0.003
					$\langle 464 R^4, b^0, s_{\text{HB}}^0, s_{\text{free}}^0, t^0, s_X^0 \rangle$	20.66%	0.000	0.000	0.000
					$\langle 464 R^1, b^0, s_{\text{HB}}^0, s_{\text{free}}^0, t^0, s_X^0 \rangle$	0.00%	0.000	-0.001	0.001
4769.6	0.055	-0.000	-0.002	-0.001	$\langle 465 R^1, b^0, s_{\text{HB}}^0, s_{\text{free}}^1, t^0, s_X^0 \rangle$	30.17%	0.000	-0.001	-0.002
					$\langle 465 R^4, b^0, s_{\text{HB}}^0, s_{\text{free}}^0, t^0, s_X^0 \rangle$	15.04%	0.000	0.000	0.000
					$\langle 465 R^1, b^0, s_{\text{HB}}^1, s_{\text{free}}^0, t^5, s_X^0 \rangle$	6.58%	0.000	0.000	0.000
					$\langle 465 R^1, b^0, s_{\text{HB}}^0, s_{\text{free}}^1, t^2, s_X^0 \rangle$	5.06%	0.000	0.000	0.000
					$\langle 465 R^1, b^0, s_{\text{HB}}^0, s_{\text{free}}^0, t^0, s_X^0 \rangle$	0.01%	0.001	-0.001	0.002
4798.5	0.077	0.002	-0.001	-0.000	$\langle 475 R^5, b^0, s_{\text{HB}}^0, s_{\text{free}}^0, t^0, s_X^0 \rangle$	23.16%	0.000	0.001	-0.001
					$\langle 475 R^3, b^1, s_{\text{HB}}^0, s_{\text{free}}^0, t^0, s_X^0 \rangle$	7.32%	0.000	0.000	0.000
					$\langle 475 R^2, b^0, s_{\text{HB}}^1, s_{\text{free}}^0, t^0, s_X^0 \rangle$	2.51%	0.002	0.001	-0.002
					$\langle 475 R^0, b^0, s_{\text{HB}}^2, s_{\text{free}}^0, t^0, s_X^0 \rangle$	0.78%	0.007	0.000	0.000
					$\langle 475 R^0, b^0, s_{\text{HB}}^1, s_{\text{free}}^0, t^0, s_X^0 \rangle$	0.08%	-0.016	-0.001	0.000
4820.4	0.057	0.002	0.000	0.000	$\langle 483 R^2, b^1, s_{\text{HB}}^0, s_{\text{free}}^0, t^4, s_X^0 \rangle$	29.54%	0.000	0.000	0.000
					$\langle 483 R^1, b^0, s_{\text{HB}}^1, s_{\text{free}}^0, t^5, s_X^0 \rangle$	7.02%	0.000	0.000	0.000
					$\langle 483 R^2, b^0, s_{\text{HB}}^1, s_{\text{free}}^0, t^0, s_X^0 \rangle$	0.42%	-0.001	0.000	0.000
					$\langle 483 R^0, b^0, s_{\text{HB}}^2, s_{\text{free}}^0, t^0, s_X^0 \rangle$	0.10%	0.003	0.000	0.000
					$\langle 483 R^0, b^0, s_{\text{HB}}^1, s_{\text{free}}^0, t^0, s_X^0 \rangle$	0.00%	-0.001	0.000	0.000
4821.3	0.093	-0.003	-0.000	-0.000	$\langle 484 R^2, b^1, s_{\text{HB}}^0, s_{\text{free}}^0, t^4, s_X^0 \rangle$	12.93%	0.000	0.000	0.000
					$\langle 484 R^3, b^1, s_{\text{HB}}^0, s_{\text{free}}^0, t^0, s_X^0 \rangle$	8.66%	0.000	0.000	0.000
					$\langle 484 R^2, b^0, s_{\text{HB}}^1, s_{\text{free}}^0, t^0, s_X^0 \rangle$	1.05%	0.001	0.000	0.000
					$\langle 484 R^0, b^0, s_{\text{HB}}^2, s_{\text{free}}^0, t^0, s_X^0 \rangle$	0.19%	-0.004	0.000	0.000
					$\langle 484 R^0, b^0, s_{\text{HB}}^1, s_{\text{free}}^0, t^0, s_X^0 \rangle$	0.00%	0.002	0.000	0.000
4834.0	0.559	-0.007	-0.001	-0.000	$\langle 486 R^3, b^1, s_{\text{HB}}^0, s_{\text{free}}^0, t^0, s_X^0 \rangle$	6.20%	0.000	0.000	0.000
					$\langle 486 R^4, b^0, s_{\text{HB}}^0, s_{\text{free}}^0, t^1, s_X^0 \rangle$	6.03%	0.000	0.000	0.000
					$\langle 486 R^2, b^0, s_{\text{HB}}^1, s_{\text{free}}^0, t^0, s_X^0 \rangle$	4.87%	0.003	0.000	0.000
					$\langle 486 R^0, b^0, s_{\text{HB}}^2, s_{\text{free}}^0, t^1, s_X^0 \rangle$	1.57%	0.002	0.000	0.000
					$\langle 486 R^0, b^0, s_{\text{HB}}^2, s_{\text{free}}^0, t^0, s_X^0 \rangle$	0.85%	-0.007	0.000	0.000
4838.5	0.170	-0.004	-0.000	0.000	$\langle 488 R^4, b^0, s_{\text{HB}}^0, s_{\text{free}}^0, t^3, s_X^0 \rangle$	17.49%	0.000	0.000	0.000
					$\langle 488 R^0, b^0, s_{\text{HB}}^1, s_{\text{free}}^0, t^0, s_X^1 \rangle$	5.34%	-0.003	-0.001	0.000
					$\langle 488 R^0, b^0, s_{\text{HB}}^2, s_{\text{free}}^0, t^0, s_X^0 \rangle$	0.05%	-0.002	0.000	0.000
					$\langle 488 R^0, b^0, s_{\text{HB}}^1, s_{\text{free}}^0, t^0, s_X^0 \rangle$	0.00%	0.002	0.000	0.000
4840.3	0.375	0.006	0.001	-0.000	$\langle 489 R^0, b^0, s_{\text{HB}}^1, s_{\text{free}}^0, t^0, s_X^1 \rangle$	31.31%	0.008	0.001	0.000
					$\langle 489 R^1, b^1, s_{\text{HB}}^0, s_{\text{free}}^0, t^0, s_X^1 \rangle$	12.11%	0.000	0.000	0.000
					$\langle 489 R^0, b^0, s_{\text{HB}}^1, s_{\text{free}}^0, t^1, s_X^1 \rangle$	6.44%	0.000	0.000	0.000
					$\langle 489 R^2, b^0, s_{\text{HB}}^0, s_{\text{free}}^0, t^0, s_X^1 \rangle$	1.59%	-0.001	0.000	0.000
					$\langle 489 R^0, b^0, s_{\text{HB}}^0, s_{\text{free}}^0, t^0, s_X^1 \rangle$	0.03%	-0.002	0.000	0.000
4850.4	0.195	0.004	-0.000	0.000	$\langle 491 R^2, b^0, s_{\text{HB}}^1, s_{\text{free}}^0, t^0, s_X^0 \rangle$	17.18%	0.006	0.000	0.000
					$\langle 491 R^0, b^0, s_{\text{HB}}^2, s_{\text{free}}^0, t^0, s_X^0 \rangle$	0.66%	0.007	0.000	0.000
					$\langle 491 R^0, b^0, s_{\text{HB}}^1, s_{\text{free}}^0, t^0, s_X^0 \rangle$	0.02%	-0.007	-0.001	0.000
4860.2	0.299	0.005	0.000	0.000	$\langle 492 R^3, b^1, s_{\text{HB}}^0, s_{\text{free}}^0, t^0, s_X^0 \rangle$	13.13%	0.000	0.000	0.000

					$\langle 492 R^2, b^0, s_{\text{HB}}^1, s_{\text{free}}^0, t^0, s_X^0 \rangle$	2.74%	0.005	0.001	0.000
					$\langle 492 R^0, b^0, s_{\text{HB}}^2, s_{\text{free}}^0, t^0, s_X^0 \rangle$	1.05%	0.008	0.001	0.000
					$\langle 492 R^0, b^0, s_{\text{HB}}^1, s_{\text{free}}^0, t^0, s_X^0 \rangle$	0.03%	-0.010	-0.001	0.000
4863.6	0.051	0.002	0.000	0.000	$\langle 493 R^2, b^0, s_{\text{HB}}^0, s_{\text{free}}^0, t^3, s_X^1 \rangle$	72.82%	0.000	0.000	0.000
					$\langle 493 R^0, b^0, s_{\text{HB}}^1, s_{\text{free}}^0, t^0, s_X^1 \rangle$	0.72%	0.001	0.000	0.000
					$\langle 493 R^0, b^0, s_{\text{HB}}^2, s_{\text{free}}^0, t^0, s_X^0 \rangle$	0.08%	0.002	0.000	0.000
					$\langle 493 R^0, b^0, s_{\text{HB}}^1, s_{\text{free}}^0, t^0, s_X^0 \rangle$	0.00%	-0.003	0.000	0.000
4878.2	0.367	0.005	0.001	0.000	$\langle 497 R^2, b^0, s_{\text{HB}}^1, s_{\text{free}}^0, t^0, s_X^0 \rangle$	27.79%	-0.003	0.000	0.000
					$\langle 497 R^3, b^1, s_{\text{HB}}^0, s_{\text{free}}^0, t^0, s_X^0 \rangle$	19.56%	0.000	0.000	0.000
					$\langle 497 R^0, b^0, s_{\text{HB}}^2, s_{\text{free}}^0, t^0, s_X^0 \rangle$	1.29%	0.009	0.001	-0.001
					$\langle 497 R^0, b^0, s_{\text{HB}}^2, s_{\text{free}}^0, t^1, s_X^0 \rangle$	0.72%	-0.002	0.000	0.000
4882.9	0.758	-0.005	0.006	-0.000	$\langle 501 R^1, b^0, s_{\text{HB}}^0, s_{\text{free}}^1, t^0, s_X^0 \rangle$	61.92%	-0.003	0.002	-0.001
					$\langle 501 R^4, b^0, s_{\text{HB}}^0, s_{\text{free}}^0, t^0, s_X^0 \rangle$	5.83%	0.000	0.000	0.000
					$\langle 501 R^1, b^0, s_{\text{HB}}^0, s_{\text{free}}^0, t^0, s_X^0 \rangle$	0.05%	-0.002	0.003	-0.005
4885.2	0.323	-0.003	0.004	-0.000	$\langle 502 R^4, b^0, s_{\text{HB}}^0, s_{\text{free}}^0, t^0, s_X^0 \rangle$	35.62%	0.000	0.000	0.000
					$\langle 502 R^1, b^0, s_{\text{HB}}^0, s_{\text{free}}^1, t^0, s_X^0 \rangle$	25.99%	-0.002	0.001	-0.001
					$\langle 502 R^2, b^0, s_{\text{HB}}^1, s_{\text{free}}^0, t^0, s_X^0 \rangle$	0.32%	-0.002	0.000	0.000
					$\langle 502 R^1, b^0, s_{\text{HB}}^0, s_{\text{free}}^0, t^0, s_X^0 \rangle$	0.03%	-0.001	0.003	-0.004
					$\langle 502 R^0, b^0, s_{\text{HB}}^1, s_{\text{free}}^0, t^0, s_X^0 \rangle$	0.00%	0.002	0.000	0.000
4887.5	0.167	0.004	-0.000	-0.000	$\langle 504 R^3, b^1, s_{\text{HB}}^0, s_{\text{free}}^0, t^1, s_X^0 \rangle$	12.21%	0.000	0.000	0.000
					$\langle 504 R^5, b^0, s_{\text{HB}}^0, s_{\text{free}}^0, t^0, s_X^0 \rangle$	6.75%	0.000	0.000	0.000
					$\langle 504 R^3, b^1, s_{\text{HB}}^0, s_{\text{free}}^0, t^2, s_X^0 \rangle$	5.45%	0.000	0.000	0.000
					$\langle 504 R^3, b^0, s_{\text{HB}}^1, s_{\text{free}}^0, t^0, s_X^0 \rangle$	1.25%	0.000	0.001	-0.001
					$\langle 504 R^0, b^0, s_{\text{HB}}^2, s_{\text{free}}^0, t^0, s_X^0 \rangle$	0.43%	0.005	0.000	0.000
					$\langle 504 R^0, b^0, s_{\text{HB}}^1, s_{\text{free}}^0, t^0, s_X^0 \rangle$	0.00%	-0.004	0.000	0.000
4893.0	0.127	0.002	0.002	0.001	$\langle 506 R^0, b^3, s_{\text{HB}}^0, s_{\text{free}}^0, t^0, s_X^0 \rangle$	76.22%	-0.002	0.003	0.002
					$\langle 506 R^2, b^2, s_{\text{HB}}^0, s_{\text{free}}^0, t^0, s_X^0 \rangle$	5.34%	0.000	0.000	0.000
					$\langle 506 R^0, b^1, s_{\text{HB}}^0, s_{\text{free}}^0, t^0, s_X^0 \rangle$	0.08%	0.002	-0.002	-0.002
					$\langle 506 R^1, b^0, s_{\text{HB}}^0, s_{\text{free}}^0, t^0, s_X^0 \rangle$	0.00%	0.001	-0.001	0.001
4924.8	0.110	-0.003	-0.000	-0.000	$\langle 519 R^4, b^0, s_{\text{HB}}^0, s_{\text{free}}^0, t^2, s_X^0 \rangle$	38.84%	0.000	0.000	0.000
					$\langle 519 R^0, b^0, s_{\text{HB}}^2, s_{\text{free}}^0, t^0, s_X^0 \rangle$	0.34%	-0.005	0.000	0.000
					$\langle 519 R^2, b^0, s_{\text{HB}}^1, s_{\text{free}}^0, t^0, s_X^0 \rangle$	0.15%	-0.001	0.000	0.000
					$\langle 519 R^0, b^0, s_{\text{HB}}^1, s_{\text{free}}^0, t^0, s_X^0 \rangle$	0.00%	0.003	0.000	0.000
4925.8	0.068	0.002	0.000	0.000	$\langle 520 R^2, b^0, s_{\text{HB}}^0, s_{\text{free}}^0, t^2, s_X^1 \rangle$	32.79%	0.000	0.000	0.000
					$\langle 520 R^1, b^1, s_{\text{HB}}^0, s_{\text{free}}^0, t^1, s_X^1 \rangle$	26.87%	0.000	0.000	0.000
					$\langle 520 R^0, b^0, s_{\text{HB}}^1, s_{\text{free}}^0, t^0, s_X^1 \rangle$	0.88%	0.001	0.000	0.000
					$\langle 520 R^2, b^0, s_{\text{HB}}^1, s_{\text{free}}^0, t^0, s_X^0 \rangle$	0.10%	0.001	0.000	0.000
					$\langle 520 R^0, b^0, s_{\text{HB}}^2, s_{\text{free}}^0, t^0, s_X^0 \rangle$	0.06%	0.002	0.000	0.000
4932.3	0.306	0.005	0.000	0.000	$\langle 523 R^3, b^1, s_{\text{HB}}^0, s_{\text{free}}^0, t^2, s_X^0 \rangle$	5.54%	0.000	0.000	0.000
					$\langle 523 R^2, b^0, s_{\text{HB}}^1, s_{\text{free}}^0, t^0, s_X^0 \rangle$	1.08%	0.002	0.000	0.000
					$\langle 523 R^0, b^0, s_{\text{HB}}^2, s_{\text{free}}^0, t^0, s_X^0 \rangle$	0.72%	0.007	0.000	0.000

					$\langle 523 R^0, b^0, s_{\text{HB}}^1, s_{\text{free}}^0, t^0, s_X^0 \rangle$	0.00%	-0.002	0.000	0.000
4937.8	0.164	-0.004	-0.000	-0.000	$\langle 525 R^4, b^0, s_{\text{HB}}^0, s_{\text{free}}^0, t^1, s_X^0 \rangle$	12.60%	0.000	0.000	0.000
					$\langle 525 R^1, b^2, s_{\text{HB}}^0, s_{\text{free}}^0, t^2, s_X^0 \rangle$	6.31%	0.000	0.000	0.000
					$\langle 525 R^2, b^0, s_{\text{HB}}^1, s_{\text{free}}^0, t^0, s_X^0 \rangle$	2.67%	-0.002	0.000	0.000
					$\langle 525 R^0, b^0, s_{\text{HB}}^2, s_{\text{free}}^0, t^0, s_X^0 \rangle$	1.08%	-0.008	-0.001	0.000
					$\langle 525 R^0, b^0, s_{\text{HB}}^1, s_{\text{free}}^0, t^0, s_X^0 \rangle$	0.02%	0.008	0.001	0.000
4938.3	0.217	0.004	0.000	0.000	$\langle 526 R^4, b^0, s_{\text{HB}}^0, s_{\text{free}}^0, t^2, s_X^0 \rangle$	22.73%	0.000	0.000	0.000
					$\langle 526 R^2, b^0, s_{\text{HB}}^1, s_{\text{free}}^0, t^0, s_X^0 \rangle$	0.66%	-0.002	0.000	0.000
					$\langle 526 R^0, b^0, s_{\text{HB}}^2, s_{\text{free}}^0, t^0, s_X^0 \rangle$	0.23%	0.004	0.000	0.000
					$\langle 526 R^0, b^0, s_{\text{HB}}^1, s_{\text{free}}^0, t^0, s_X^0 \rangle$	0.00%	0.003	0.000	0.000
4940.0	0.157	-0.004	-0.000	-0.000	$\langle 527 R^1, b^2, s_{\text{HB}}^0, s_{\text{free}}^0, t^2, s_X^0 \rangle$	49.08%	0.000	0.000	0.000
					$\langle 527 R^0, b^0, s_{\text{HB}}^1, s_{\text{free}}^0, t^0, s_X^1 \rangle$	0.97%	-0.001	0.000	0.000
					$\langle 527 R^0, b^0, s_{\text{HB}}^2, s_{\text{free}}^0, t^0, s_X^0 \rangle$	0.39%	-0.005	0.000	0.000
					$\langle 527 R^0, b^0, s_{\text{HB}}^1, s_{\text{free}}^0, t^0, s_X^0 \rangle$	0.00%	0.004	0.000	0.000
4940.1	0.060	-0.002	-0.000	0.000	$\langle 528 R^1, b^1, s_{\text{HB}}^0, s_{\text{free}}^0, t^0, s_X^1 \rangle$	22.86%	0.000	0.000	0.000
					$\langle 528 R^2, b^0, s_{\text{HB}}^0, s_{\text{free}}^0, t^2, s_X^1 \rangle$	14.32%	0.000	0.000	0.000
					$\langle 528 R^1, b^2, s_{\text{HB}}^0, s_{\text{free}}^0, t^2, s_X^0 \rangle$	13.39%	0.000	0.000	0.000
					$\langle 528 R^0, b^0, s_{\text{HB}}^1, s_{\text{free}}^0, t^0, s_X^1 \rangle$	7.95%	-0.004	-0.001	0.000
					$\langle 528 R^0, b^0, s_{\text{HB}}^0, s_{\text{free}}^0, t^0, s_X^1 \rangle$	0.02%	0.001	0.000	0.000
					$\langle 528 R^0, b^0, s_{\text{HB}}^1, s_{\text{free}}^0, t^0, s_X^0 \rangle$	0.00%	-0.001	0.000	0.000
4948.1	0.056	-0.002	-0.000	-0.000	$\langle 530 R^4, b^0, s_{\text{HB}}^0, s_{\text{free}}^0, t^2, s_X^0 \rangle$	23.77%	0.000	0.000	0.000
					$\langle 530 R^2, b^0, s_{\text{HB}}^1, s_{\text{free}}^0, t^0, s_X^0 \rangle$	0.69%	0.002	0.000	0.000
					$\langle 530 R^0, b^0, s_{\text{HB}}^2, s_{\text{free}}^0, t^0, s_X^0 \rangle$	0.15%	-0.003	0.000	0.000
					$\langle 530 R^0, b^0, s_{\text{HB}}^1, s_{\text{free}}^0, t^0, s_X^0 \rangle$	0.00%	-0.004	0.000	0.000
4950.2	0.775	0.008	0.001	0.000	$\langle 531 R^3, b^1, s_{\text{HB}}^0, s_{\text{free}}^0, t^0, s_X^0 \rangle$	14.31%	0.000	0.000	0.000
					$\langle 531 R^2, b^0, s_{\text{HB}}^1, s_{\text{free}}^0, t^1, s_X^0 \rangle$	5.93%	0.000	0.000	0.000
					$\langle 531 R^0, b^0, s_{\text{HB}}^2, s_{\text{free}}^0, t^0, s_X^0 \rangle$	3.08%	0.014	0.001	-0.001
					$\langle 531 R^2, b^0, s_{\text{HB}}^1, s_{\text{free}}^0, t^0, s_X^0 \rangle$	2.66%	0.003	0.000	0.000
					$\langle 531 R^0, b^0, s_{\text{HB}}^1, s_{\text{free}}^0, t^0, s_X^0 \rangle$	0.01%	-0.006	-0.001	0.000
4952.2	0.402	-0.006	-0.001	-0.000	$\langle 532 R^4, b^0, s_{\text{HB}}^0, s_{\text{free}}^0, t^1, s_X^0 \rangle$	15.20%	0.000	0.000	0.000
					$\langle 532 R^2, b^0, s_{\text{HB}}^1, s_{\text{free}}^0, t^0, s_X^0 \rangle$	2.79%	0.001	0.000	0.000
					$\langle 532 R^0, b^0, s_{\text{HB}}^2, s_{\text{free}}^0, t^0, s_X^0 \rangle$	1.52%	-0.010	-0.001	0.001
4958.9	0.340	-0.005	-0.000	-0.000	$\langle 534 R^4, b^0, s_{\text{HB}}^0, s_{\text{free}}^0, t^1, s_X^0 \rangle$	12.97%	0.000	0.000	0.000
					$\langle 534 R^3, b^1, s_{\text{HB}}^0, s_{\text{free}}^0, t^0, s_X^0 \rangle$	11.25%	0.000	0.000	0.000
					$\langle 534 R^2, b^0, s_{\text{HB}}^1, s_{\text{free}}^0, t^0, s_X^0 \rangle$	2.82%	-0.002	0.000	0.000
					$\langle 534 R^0, b^0, s_{\text{HB}}^2, s_{\text{free}}^0, t^0, s_X^0 \rangle$	1.19%	-0.009	-0.001	0.001
					$\langle 534 R^0, b^0, s_{\text{HB}}^1, s_{\text{free}}^0, t^0, s_X^0 \rangle$	0.02%	0.008	0.001	0.000
4975.1	1.242	-0.010	-0.001	-0.000	$\langle 537 R^4, b^0, s_{\text{HB}}^0, s_{\text{free}}^0, t^3, s_X^0 \rangle$	21.87%	0.000	0.000	0.000
					$\langle 537 R^0, b^0, s_{\text{HB}}^2, s_{\text{free}}^0, t^0, s_X^0 \rangle$	3.87%	-0.016	-0.001	0.001
					$\langle 537 R^0, b^0, s_{\text{HB}}^2, s_{\text{free}}^0, t^1, s_X^0 \rangle$	1.99%	0.003	0.000	0.000
					$\langle 537 R^2, b^0, s_{\text{HB}}^1, s_{\text{free}}^0, t^0, s_X^0 \rangle$	1.83%	0.004	0.000	0.000
4976.5	0.403	0.006	0.000	0.000	$\langle 538 R^4, b^0, s_{\text{HB}}^0, s_{\text{free}}^0, t^3, s_X^0 \rangle$	9.38%	0.000	0.000	0.000

					$\langle 538 R^2, b^0, s_{\text{HB}}^1, s_{\text{free}}^0, t^0, s_X^0 \rangle$	2.07%	-0.005	0.000	0.000
					$\langle 538 R^0, b^0, s_{\text{HB}}^2, s_{\text{free}}^0, t^0, s_X^0 \rangle$	1.37%	0.009	0.001	-0.001
5016.7	0.219	0.004	0.000	0.000	$\langle 554 R^3, b^1, s_{\text{HB}}^0, s_{\text{free}}^0, t^1, s_X^0 \rangle$	18.31%	0.000	0.000	0.000
					$\langle 554 R^2, b^0, s_{\text{HB}}^1, s_{\text{free}}^0, t^2, s_X^0 \rangle$	5.01%	0.000	0.000	0.000
					$\langle 554 R^0, b^0, s_{\text{HB}}^2, s_{\text{free}}^0, t^1, s_X^0 \rangle$	2.41%	-0.003	0.000	0.000
					$\langle 554 R^0, b^0, s_{\text{HB}}^2, s_{\text{free}}^0, t^0, s_X^0 \rangle$	0.25%	0.004	0.000	0.000
					$\langle 554 R^0, b^0, s_{\text{HB}}^1, s_{\text{free}}^0, t^0, s_X^0 \rangle$	0.01%	0.006	0.001	0.000
5033.9	0.570	-0.007	-0.001	-0.000	$\langle 558 R^4, b^0, s_{\text{HB}}^0, s_{\text{free}}^0, t^0, s_X^0 \rangle$	36.73%	0.000	0.000	0.000
					$\langle 558 R^2, b^0, s_{\text{HB}}^1, s_{\text{free}}^0, t^0, s_X^0 \rangle$	4.37%	-0.001	0.000	0.000
					$\langle 558 R^0, b^0, s_{\text{HB}}^2, s_{\text{free}}^0, t^0, s_X^0 \rangle$	1.32%	-0.009	-0.001	0.001
5034.2	0.409	0.006	0.000	0.000	$\langle 559 R^2, b^0, s_{\text{HB}}^0, s_{\text{free}}^0, t^1, s_X^1 \rangle$	19.49%	0.000	0.000	0.000
					$\langle 559 R^4, b^0, s_{\text{HB}}^0, s_{\text{free}}^0, t^0, s_X^0 \rangle$	5.33%	0.000	0.000	0.000
					$\langle 559 R^0, b^0, s_{\text{HB}}^1, s_{\text{free}}^0, t^0, s_X^1 \rangle$	4.33%	0.003	0.001	0.000
					$\langle 559 R^0, b^0, s_{\text{HB}}^2, s_{\text{free}}^0, t^0, s_X^0 \rangle$	0.61%	0.006	0.000	0.000
					$\langle 559 R^0, b^0, s_{\text{HB}}^0, s_{\text{free}}^0, t^0, s_X^1 \rangle$	0.04%	-0.002	0.000	0.000
5040.2	0.480	-0.006	-0.000	-0.000	$\langle 561 R^4, b^0, s_{\text{HB}}^0, s_{\text{free}}^0, t^2, s_X^0 \rangle$	35.14%	0.000	0.000	0.000
					$\langle 561 R^0, b^0, s_{\text{HB}}^2, s_{\text{free}}^0, t^0, s_X^0 \rangle$	1.79%	-0.011	-0.001	0.001
					$\langle 561 R^0, b^0, s_{\text{HB}}^2, s_{\text{free}}^0, t^1, s_X^0 \rangle$	0.59%	0.001	0.000	0.000
					$\langle 561 R^0, b^0, s_{\text{HB}}^1, s_{\text{free}}^0, t^0, s_X^0 \rangle$	0.00%	0.001	0.000	0.000
5041.1	0.075	0.002	0.000	0.000	$\langle 562 R^2, b^0, s_{\text{HB}}^1, s_{\text{free}}^0, t^0, s_X^0 \rangle$	13.64%	-0.001	0.000	0.000
					$\langle 562 R^0, b^0, s_{\text{HB}}^2, s_{\text{free}}^0, t^0, s_X^0 \rangle$	0.20%	0.004	0.000	0.000
					$\langle 562 R^0, b^0, s_{\text{HB}}^1, s_{\text{free}}^0, t^0, s_X^0 \rangle$	0.00%	0.001	0.000	0.000
5043.0	0.380	0.005	0.001	0.000	$\langle 563 R^2, b^0, s_{\text{HB}}^0, s_{\text{free}}^0, t^1, s_X^1 \rangle$	38.89%	0.000	0.000	0.000
					$\langle 563 R^1, b^1, s_{\text{HB}}^0, s_{\text{free}}^0, t^1, s_X^1 \rangle$	12.57%	0.000	0.000	0.000
					$\langle 563 R^0, b^0, s_{\text{HB}}^1, s_{\text{free}}^0, t^0, s_X^1 \rangle$	7.26%	0.004	0.001	0.000
					$\langle 563 R^0, b^0, s_{\text{HB}}^1, s_{\text{free}}^0, t^1, s_X^1 \rangle$	5.65%	0.000	0.000	0.000
					$\langle 563 R^0, b^0, s_{\text{HB}}^2, s_{\text{free}}^0, t^0, s_X^0 \rangle$	0.51%	0.006	0.000	0.000
					$\langle 563 R^0, b^0, s_{\text{HB}}^0, s_{\text{free}}^0, t^0, s_X^1 \rangle$	0.06%	-0.003	-0.001	0.000
5049.8	0.180	0.004	0.000	0.000	$\langle 565 R^4, b^0, s_{\text{HB}}^0, s_{\text{free}}^0, t^3, s_X^0 \rangle$	43.89%	0.000	0.000	0.000
					$\langle 565 R^0, b^0, s_{\text{HB}}^2, s_{\text{free}}^0, t^0, s_X^0 \rangle$	0.54%	0.006	0.000	0.000
					$\langle 565 R^2, b^0, s_{\text{HB}}^1, s_{\text{free}}^0, t^0, s_X^0 \rangle$	0.43%	-0.001	0.000	0.000
					$\langle 565 R^0, b^0, s_{\text{HB}}^2, s_{\text{free}}^0, t^1, s_X^0 \rangle$	0.39%	-0.001	0.000	0.000
5054.6	0.834	-0.008	-0.001	-0.000	$\langle 566 R^4, b^0, s_{\text{HB}}^0, s_{\text{free}}^0, t^2, s_X^0 \rangle$	4.74%	0.000	0.000	0.000
					$\langle 566 R^0, b^0, s_{\text{HB}}^2, s_{\text{free}}^0, t^0, s_X^0 \rangle$	3.55%	-0.015	-0.001	0.001
					$\langle 566 R^2, b^0, s_{\text{HB}}^1, s_{\text{free}}^0, t^0, s_X^0 \rangle$	0.36%	-0.002	0.000	0.000
					$\langle 566 R^0, b^0, s_{\text{HB}}^1, s_{\text{free}}^0, t^0, s_X^0 \rangle$	0.02%	0.008	0.001	0.000
5062.0	0.314	-0.005	-0.000	-0.000	$\langle 569 R^0, b^3, s_{\text{HB}}^0, s_{\text{free}}^0, t^1, s_X^0 \rangle$	47.53%	0.000	0.000	0.000
					$\langle 569 R^0, b^0, s_{\text{HB}}^2, s_{\text{free}}^0, t^0, s_X^0 \rangle$	1.06%	-0.008	-0.001	0.000
					$\langle 569 R^2, b^0, s_{\text{HB}}^1, s_{\text{free}}^0, t^0, s_X^0 \rangle$	0.51%	0.001	0.000	0.000
					$\langle 569 R^0, b^0, s_{\text{HB}}^1, s_{\text{free}}^0, t^0, s_X^0 \rangle$	0.00%	0.004	0.000	0.000
5076.6	0.329	0.005	-0.000	-0.000	$\langle 573 R^1, b^1, s_{\text{HB}}^0, s_{\text{free}}^0, t^0, s_X^1 \rangle$	13.67%	-0.001	0.000	0.000
					$\langle 573 R^1, b^0, s_{\text{HB}}^0, s_{\text{free}}^1, t^2, s_X^0 \rangle$	9.37%	0.000	0.000	0.000

					$\langle 573 R^4, b^0, s_{\text{HB}}^0, s_{\text{free}}^0, t^2, s_X^0 \rangle$	9.14%	0.000	0.000	0.000
					$\langle 573 R^2, b^2, s_{\text{HB}}^0, s_{\text{free}}^0, t^0, s_X^0 \rangle$	7.03%	0.000	0.000	0.000
					$\langle 573 R^0, b^0, s_{\text{HB}}^2, s_{\text{free}}^0, t^0, s_X^0 \rangle$	0.92%	0.008	0.000	0.000
					$\langle 573 R^0, b^0, s_{\text{HB}}^2, s_{\text{free}}^0, t^1, s_X^0 \rangle$	0.61%	-0.001	0.000	0.000
					$\langle 573 R^0, b^0, s_{\text{HB}}^1, s_{\text{free}}^0, t^0, s_X^0 \rangle$	0.00%	-0.002	0.000	0.000
5076.9	0.143	-0.003	-0.000	-0.000	$\langle 574 R^1, b^1, s_{\text{HB}}^0, s_{\text{free}}^0, t^0, s_X^1 \rangle$	60.30%	-0.001	0.000	0.000
					$\langle 574 R^0, b^0, s_{\text{HB}}^2, s_{\text{free}}^0, t^0, s_X^0 \rangle$	0.39%	-0.005	0.000	0.000
					$\langle 574 R^0, b^0, s_{\text{HB}}^0, s_{\text{free}}^0, t^0, s_X^1 \rangle$	0.02%	0.002	0.000	0.000
					$\langle 574 R^0, b^0, s_{\text{HB}}^1, s_{\text{free}}^0, t^0, s_X^0 \rangle$	0.00%	0.001	0.000	0.000
5077.9	0.253	-0.004	0.000	-0.000	$\langle 576 R^1, b^0, s_{\text{HB}}^0, s_{\text{free}}^1, t^2, s_X^0 \rangle$	39.91%	0.000	0.000	0.000
					$\langle 576 R^4, b^0, s_{\text{HB}}^0, s_{\text{free}}^0, t^2, s_X^0 \rangle$	6.68%	0.000	0.000	0.000
					$\langle 576 R^0, b^0, s_{\text{HB}}^2, s_{\text{free}}^0, t^0, s_X^0 \rangle$	0.82%	-0.007	0.000	0.000
					$\langle 576 R^0, b^0, s_{\text{HB}}^2, s_{\text{free}}^0, t^1, s_X^0 \rangle$	0.28%	0.001	0.000	0.000
					$\langle 576 R^0, b^0, s_{\text{HB}}^1, s_{\text{free}}^0, t^0, s_X^0 \rangle$	0.00%	0.003	0.000	0.000
5091.9	0.172	-0.004	-0.000	-0.000	$\langle 583 R^4, b^0, s_{\text{HB}}^0, s_{\text{free}}^0, t^1, s_X^0 \rangle$	16.18%	0.000	0.000	0.000
					$\langle 583 R^3, b^1, s_{\text{HB}}^0, s_{\text{free}}^0, t^1, s_X^0 \rangle$	13.81%	0.000	0.000	0.000
					$\langle 583 R^2, b^0, s_{\text{HB}}^1, s_{\text{free}}^0, t^1, s_X^0 \rangle$	8.77%	0.000	0.000	0.000
					$\langle 583 R^0, b^0, s_{\text{HB}}^2, s_{\text{free}}^0, t^0, s_X^0 \rangle$	1.02%	-0.008	-0.001	0.000
					$\langle 583 R^2, b^0, s_{\text{HB}}^1, s_{\text{free}}^0, t^0, s_X^0 \rangle$	0.58%	0.001	0.000	0.000
					$\langle 583 R^0, b^0, s_{\text{HB}}^1, s_{\text{free}}^0, t^0, s_X^0 \rangle$	0.01%	0.005	0.000	0.000
5105.8	0.123	-0.003	-0.000	-0.000	$\langle 588 R^5, b^0, s_{\text{HB}}^0, s_{\text{free}}^0, t^1, s_X^0 \rangle$	26.04%	0.000	0.000	0.000
					$\langle 588 R^3, b^1, s_{\text{HB}}^0, s_{\text{free}}^0, t^2, s_X^0 \rangle$	7.68%	0.000	0.000	0.000
					$\langle 588 R^3, b^0, s_{\text{HB}}^0, s_{\text{free}}^0, t^0, s_X^1 \rangle$	5.86%	0.000	0.000	0.000
					$\langle 588 R^0, b^0, s_{\text{HB}}^2, s_{\text{free}}^0, t^0, s_X^0 \rangle$	0.53%	-0.006	0.000	0.000
					$\langle 588 R^0, b^0, s_{\text{HB}}^1, s_{\text{free}}^0, t^1, s_X^0 \rangle$	0.02%	-0.001	0.000	0.000
					$\langle 588 R^0, b^0, s_{\text{HB}}^1, s_{\text{free}}^0, t^0, s_X^0 \rangle$	0.01%	0.005	0.000	0.000
5128.4	0.051	-0.002	-0.000	-0.000	$\langle 597 R^3, b^1, s_{\text{HB}}^0, s_{\text{free}}^0, t^2, s_X^0 \rangle$	14.81%	0.000	0.000	0.000
					$\langle 597 R^5, b^0, s_{\text{HB}}^0, s_{\text{free}}^0, t^0, s_X^0 \rangle$	9.22%	0.000	0.000	0.000
					$\langle 597 R^0, b^0, s_{\text{HB}}^2, s_{\text{free}}^0, t^0, s_X^0 \rangle$	0.50%	-0.006	0.000	0.000
					$\langle 597 R^2, b^0, s_{\text{HB}}^1, s_{\text{free}}^0, t^0, s_X^0 \rangle$	0.05%	0.001	0.000	0.000
					$\langle 597 R^0, b^0, s_{\text{HB}}^1, s_{\text{free}}^0, t^0, s_X^0 \rangle$	0.00%	0.002	0.000	0.000
5135.8	0.103	-0.003	-0.000	-0.000	$\langle 600 R^3, b^1, s_{\text{HB}}^0, s_{\text{free}}^0, t^0, s_X^0 \rangle$	22.72%	0.000	0.000	0.000
					$\langle 600 R^0, b^0, s_{\text{HB}}^2, s_{\text{free}}^0, t^0, s_X^0 \rangle$	0.43%	-0.005	0.000	0.000
					$\langle 600 R^2, b^0, s_{\text{HB}}^1, s_{\text{free}}^0, t^0, s_X^0 \rangle$	0.30%	-0.001	0.000	0.000
					$\langle 600 R^0, b^0, s_{\text{HB}}^1, s_{\text{free}}^0, t^0, s_X^0 \rangle$	0.00%	0.001	0.000	0.000
5137.9	0.067	-0.002	-0.000	-0.000	$\langle 601 R^2, b^0, s_{\text{HB}}^1, s_{\text{free}}^0, t^2, s_X^0 \rangle$	4.48%	0.000	0.000	0.000
					$\langle 601 R^0, b^0, s_{\text{HB}}^2, s_{\text{free}}^0, t^0, s_X^0 \rangle$	0.54%	-0.006	0.000	0.000
					$\langle 601 R^2, b^0, s_{\text{HB}}^1, s_{\text{free}}^0, t^0, s_X^0 \rangle$	0.49%	0.002	0.000	0.000
					$\langle 601 R^0, b^0, s_{\text{HB}}^1, s_{\text{free}}^0, t^1, s_X^0 \rangle$	0.03%	0.001	0.000	0.000
5141.4	0.069	0.002	0.000	0.000	$\langle 602 R^3, b^1, s_{\text{HB}}^0, s_{\text{free}}^0, t^0, s_X^0 \rangle$	5.39%	0.000	0.000	0.000
					$\langle 602 R^2, b^0, s_{\text{HB}}^1, s_{\text{free}}^0, t^0, s_X^0 \rangle$	0.66%	0.001	0.000	0.000
					$\langle 602 R^0, b^0, s_{\text{HB}}^2, s_{\text{free}}^0, t^0, s_X^0 \rangle$	0.36%	0.005	0.000	0.000

					$\langle 602 R^0, b^0, s_{\text{HB}}^1, s_{\text{free}}^0, t^0, s_X^0 \rangle$	0.00%	-0.002	0.000	0.000
5147.5	0.633	0.007	0.000	0.000	$\langle 604 R^1, b^1, s_{\text{HB}}^1, s_{\text{free}}^0, t^0, s_X^0 \rangle$	8.63%	-0.001	-0.001	0.001
					$\langle 604 R^2, b^2, s_{\text{HB}}^0, s_{\text{free}}^0, t^0, s_X^0 \rangle$	7.46%	0.000	0.000	0.000
					$\langle 604 R^0, b^0, s_{\text{HB}}^2, s_{\text{free}}^0, t^0, s_X^0 \rangle$	1.69%	0.011	0.001	-0.001
					$\langle 604 R^0, b^0, s_{\text{HB}}^2, s_{\text{free}}^0, t^1, s_X^0 \rangle$	1.58%	-0.002	0.000	0.000
5150.2	0.251	0.004	0.000	0.000	$\langle 606 R^2, b^0, s_{\text{HB}}^1, s_{\text{free}}^0, t^0, s_X^0 \rangle$	9.52%	-0.002	0.000	0.000
					$\langle 606 R^2, b^0, s_{\text{HB}}^0, s_{\text{free}}^0, t^3, s_X^1 \rangle$	6.82%	0.000	0.000	0.000
					$\langle 606 R^0, b^0, s_{\text{HB}}^2, s_{\text{free}}^0, t^0, s_X^0 \rangle$	0.75%	0.007	0.000	0.000
					$\langle 606 R^0, b^0, s_{\text{HB}}^1, s_{\text{free}}^0, t^0, s_X^0 \rangle$	0.00%	-0.002	0.000	0.000
5152.9	0.170	-0.004	-0.000	0.000	$\langle 607 R^3, b^1, s_{\text{HB}}^0, s_{\text{free}}^0, t^1, s_X^0 \rangle$	12.60%	0.000	0.000	0.000
					$\langle 607 R^4, b^0, s_{\text{HB}}^0, s_{\text{free}}^0, t^3, s_X^0 \rangle$	5.68%	0.000	0.000	0.000
					$\langle 607 R^0, b^0, s_{\text{HB}}^2, s_{\text{free}}^0, t^0, s_X^0 \rangle$	0.71%	-0.007	0.000	0.000
					$\langle 607 R^0, b^0, s_{\text{HB}}^2, s_{\text{free}}^0, t^1, s_X^0 \rangle$	0.17%	0.001	0.000	0.000
					$\langle 607 R^0, b^0, s_{\text{HB}}^1, s_{\text{free}}^0, t^0, s_X^0 \rangle$	0.00%	0.002	0.000	0.000
5156.5	0.111	0.003	-0.000	0.000	$\langle 609 R^3, b^1, s_{\text{HB}}^0, s_{\text{free}}^0, t^1, s_X^0 \rangle$	46.58%	0.000	0.000	0.000
					$\langle 609 R^0, b^0, s_{\text{HB}}^2, s_{\text{free}}^0, t^0, s_X^0 \rangle$	0.74%	0.007	0.000	0.000
					$\langle 609 R^2, b^0, s_{\text{HB}}^1, s_{\text{free}}^0, t^0, s_X^0 \rangle$	0.05%	-0.001	0.000	0.000
					$\langle 609 R^0, b^0, s_{\text{HB}}^1, s_{\text{free}}^0, t^0, s_X^0 \rangle$	0.01%	-0.004	0.000	0.000
5163.1	0.067	-0.002	0.000	0.000	$\langle 612 R^1, b^0, s_{\text{HB}}^0, s_{\text{free}}^1, t^4, s_X^0 \rangle$	51.05%	0.000	0.000	0.000
					$\langle 612 R^2, b^0, s_{\text{HB}}^1, s_{\text{free}}^0, t^0, s_X^0 \rangle$	0.92%	-0.001	0.000	0.000
					$\langle 612 R^0, b^0, s_{\text{HB}}^2, s_{\text{free}}^0, t^0, s_X^0 \rangle$	0.88%	-0.008	0.000	0.000
					$\langle 612 R^0, b^0, s_{\text{HB}}^1, s_{\text{free}}^0, t^0, s_X^0 \rangle$	0.02%	0.008	0.001	0.000
5165.9	0.122	0.003	-0.000	-0.000	$\langle 613 R^1, b^0, s_{\text{HB}}^0, s_{\text{free}}^1, t^4, s_X^0 \rangle$	14.32%	0.000	0.000	0.000
					$\langle 613 R^4, b^0, s_{\text{HB}}^0, s_{\text{free}}^0, t^3, s_X^0 \rangle$	6.02%	0.000	0.000	0.000
					$\langle 613 R^0, b^0, s_{\text{HB}}^2, s_{\text{free}}^0, t^0, s_X^0 \rangle$	1.52%	0.010	0.001	-0.001
					$\langle 613 R^0, b^0, s_{\text{HB}}^2, s_{\text{free}}^0, t^1, s_X^0 \rangle$	0.67%	0.002	0.000	0.000
					$\langle 613 R^0, b^0, s_{\text{HB}}^1, s_{\text{free}}^0, t^0, s_X^0 \rangle$	0.03%	-0.010	-0.001	0.000
5184.6	1.492	0.010	0.004	0.003	$\langle 617 R^0, b^1, s_{\text{HB}}^0, s_{\text{free}}^1, t^0, s_X^0 \rangle$	68.89%	0.003	0.008	0.004
					$\langle 617 R^0, b^1, s_{\text{HB}}^0, s_{\text{free}}^0, t^0, s_X^0 \rangle$	0.22%	0.003	-0.004	-0.003
					$\langle 617 R^0, b^0, s_{\text{HB}}^1, s_{\text{free}}^0, t^0, s_X^0 \rangle$	0.02%	0.008	0.001	0.000
5189.0	1.504	-0.010	-0.002	-0.001	$\langle 618 R^0, b^1, s_{\text{HB}}^0, s_{\text{free}}^1, t^0, s_X^0 \rangle$	10.43%	-0.001	-0.003	-0.002
					$\langle 618 R^4, b^0, s_{\text{HB}}^0, s_{\text{free}}^0, t^3, s_X^0 \rangle$	7.75%	0.000	0.000	0.000
					$\langle 618 R^0, b^0, s_{\text{HB}}^2, s_{\text{free}}^0, t^0, s_X^0 \rangle$	2.71%	-0.013	-0.001	0.001
					$\langle 618 R^2, b^0, s_{\text{HB}}^1, s_{\text{free}}^0, t^0, s_X^0 \rangle$	1.04%	0.003	0.000	0.000
5192.1	0.091	0.003	0.000	0.000	$\langle 620 R^4, b^0, s_{\text{HB}}^0, s_{\text{free}}^0, t^3, s_X^0 \rangle$	6.17%	0.000	0.000	0.000
					$\langle 620 R^2, b^0, s_{\text{HB}}^1, s_{\text{free}}^0, t^0, s_X^0 \rangle$	1.21%	-0.003	0.000	0.000
					$\langle 620 R^0, b^0, s_{\text{HB}}^2, s_{\text{free}}^0, t^0, s_X^0 \rangle$	0.42%	0.005	0.000	0.000
					$\langle 620 R^0, b^0, s_{\text{HB}}^1, s_{\text{free}}^0, t^0, s_X^0 \rangle$	0.01%	-0.005	0.000	0.000
5194.8	0.130	-0.003	-0.001	-0.000	$\langle 621 R^1, b^0, s_{\text{HB}}^0, s_{\text{free}}^1, t^2, s_X^0 \rangle$	38.74%	0.000	0.000	0.000
					$\langle 621 R^3, b^1, s_{\text{HB}}^0, s_{\text{free}}^0, t^0, s_X^0 \rangle$	17.22%	0.000	0.000	0.000
					$\langle 621 R^2, b^0, s_{\text{HB}}^1, s_{\text{free}}^0, t^0, s_X^0 \rangle$	0.49%	-0.002	0.000	0.000
					$\langle 621 R^0, b^0, s_{\text{HB}}^2, s_{\text{free}}^0, t^0, s_X^0 \rangle$	0.24%	-0.004	0.000	0.000

					$\langle 621 R^0, b^0, s_{\text{HB}}^1, s_{\text{free}}^0, t^0, s_X^0 \rangle$	0.00%	0.003	0.000	0.000
5198.5	0.115	-0.003	-0.000	-0.000	$\langle 624 R^5, b^0, s_{\text{HB}}^0, s_{\text{free}}^0, t^1, s_X^0 \rangle$	23.24%	0.000	0.000	0.000
					$\langle 624 R^1, b^0, s_{\text{HB}}^0, s_{\text{free}}^1, t^2, s_X^0 \rangle$	5.87%	0.000	0.000	0.000
					$\langle 624 R^0, b^0, s_{\text{HB}}^2, s_{\text{free}}^0, t^0, s_X^0 \rangle$	0.37%	-0.005	0.000	0.000
					$\langle 624 R^0, b^0, s_{\text{HB}}^1, s_{\text{free}}^0, t^0, s_X^0 \rangle$	0.00%	0.003	0.000	0.000
					$\langle 624 R^0, b^0, s_{\text{HB}}^0, s_{\text{free}}^0, t^0, s_X^1 \rangle$	0.00%	0.000	0.000	0.000
5203.9	0.297	0.005	0.001	0.000	$\langle 626 R^4, b^0, s_{\text{HB}}^0, s_{\text{free}}^0, t^0, s_X^0 \rangle$	6.48%	0.000	0.000	0.000
					$\langle 626 R^0, b^0, s_{\text{HB}}^2, s_{\text{free}}^0, t^0, s_X^0 \rangle$	1.21%	0.009	0.001	-0.001
					$\langle 626 R^0, b^0, s_{\text{HB}}^1, s_{\text{free}}^0, t^0, s_X^0 \rangle$	0.01%	-0.004	0.000	0.000
					$\langle 626 R^0, b^0, s_{\text{HB}}^0, s_{\text{free}}^0, t^1, s_X^0 \rangle$	0.00%	-0.001	0.000	0.000
5205.3	0.051	0.002	0.000	0.000	$\langle 627 R^4, b^0, s_{\text{HB}}^0, s_{\text{free}}^0, t^0, s_X^0 \rangle$	55.32%	0.000	0.000	0.000
					$\langle 627 R^2, b^0, s_{\text{HB}}^1, s_{\text{free}}^0, t^0, s_X^0 \rangle$	0.25%	0.001	0.000	0.000
					$\langle 627 R^0, b^0, s_{\text{HB}}^2, s_{\text{free}}^0, t^0, s_X^0 \rangle$	0.19%	0.004	0.000	0.000
					$\langle 627 R^0, b^0, s_{\text{HB}}^1, s_{\text{free}}^0, t^0, s_X^0 \rangle$	0.00%	-0.002	0.000	0.000
5211.2	0.050	0.002	0.000	0.000	$\langle 629 R^4, b^0, s_{\text{HB}}^0, s_{\text{free}}^0, t^1, s_X^0 \rangle$	16.48%	0.000	0.000	0.000
					$\langle 629 R^3, b^0, s_{\text{HB}}^0, s_{\text{free}}^0, t^1, s_X^1 \rangle$	5.31%	0.000	0.000	0.000
					$\langle 629 R^2, b^0, s_{\text{HB}}^1, s_{\text{free}}^0, t^0, s_X^0 \rangle$	1.47%	-0.004	0.000	0.000
					$\langle 629 R^0, b^0, s_{\text{HB}}^2, s_{\text{free}}^0, t^0, s_X^0 \rangle$	0.33%	0.005	0.000	0.000
5229.7	0.060	-0.002	-0.000	-0.000	$\langle 635 R^1, b^1, s_{\text{HB}}^0, s_{\text{free}}^0, t^2, s_X^1 \rangle$	18.68%	0.000	0.000	0.000
					$\langle 635 R^0, b^0, s_{\text{HB}}^1, s_{\text{free}}^0, t^1, s_X^1 \rangle$	10.50%	-0.001	0.000	0.000
					$\langle 635 R^0, b^0, s_{\text{HB}}^2, s_{\text{free}}^0, t^0, s_X^0 \rangle$	0.32%	-0.005	0.000	0.000
					$\langle 635 R^0, b^0, s_{\text{HB}}^0, s_{\text{free}}^0, t^0, s_X^1 \rangle$	0.02%	0.002	0.000	0.000
					$\langle 635 R^0, b^0, s_{\text{HB}}^1, s_{\text{free}}^0, t^0, s_X^0 \rangle$	0.00%	0.002	0.000	0.000
5259.1	0.308	0.005	0.001	0.000	$\langle 651 R^2, b^0, s_{\text{HB}}^1, s_{\text{free}}^0, t^0, s_X^0 \rangle$	19.75%	0.008	0.001	0.000
					$\langle 651 R^0, b^0, s_{\text{HB}}^2, s_{\text{free}}^0, t^0, s_X^0 \rangle$	0.78%	0.007	0.000	0.000
					$\langle 651 R^0, b^0, s_{\text{HB}}^1, s_{\text{free}}^0, t^0, s_X^0 \rangle$	0.02%	-0.008	-0.001	0.000
5261.4	0.080	-0.002	-0.000	-0.000	$\langle 652 R^2, b^0, s_{\text{HB}}^1, s_{\text{free}}^0, t^2, s_X^0 \rangle$	6.54%	0.000	0.000	0.000
					$\langle 652 R^0, b^0, s_{\text{HB}}^2, s_{\text{free}}^0, t^1, s_X^0 \rangle$	0.44%	0.001	0.000	0.000
					$\langle 652 R^0, b^0, s_{\text{HB}}^2, s_{\text{free}}^0, t^0, s_X^0 \rangle$	0.09%	-0.002	0.000	0.000
					$\langle 652 R^0, b^0, s_{\text{HB}}^1, s_{\text{free}}^0, t^0, s_X^0 \rangle$	0.00%	-0.002	0.000	0.000
5268.2	0.208	-0.004	-0.000	-0.000	$\langle 655 R^3, b^1, s_{\text{HB}}^0, s_{\text{free}}^0, t^1, s_X^0 \rangle$	5.93%	0.000	0.000	0.000
					$\langle 655 R^1, b^1, s_{\text{HB}}^0, s_{\text{free}}^0, t^2, s_X^1 \rangle$	5.61%	0.000	0.000	0.000
					$\langle 655 R^4, b^0, s_{\text{HB}}^0, s_{\text{free}}^0, t^3, s_X^0 \rangle$	5.14%	0.000	0.000	0.000
					$\langle 655 R^0, b^0, s_{\text{HB}}^2, s_{\text{free}}^0, t^0, s_X^0 \rangle$	0.74%	-0.007	0.000	0.000
					$\langle 655 R^2, b^0, s_{\text{HB}}^1, s_{\text{free}}^0, t^0, s_X^0 \rangle$	0.26%	0.001	0.000	0.000
					$\langle 655 R^0, b^0, s_{\text{HB}}^1, s_{\text{free}}^0, t^0, s_X^0 \rangle$	0.00%	0.001	0.000	0.000
5268.7	0.092	0.003	0.000	0.000	$\langle 656 R^4, b^0, s_{\text{HB}}^0, s_{\text{free}}^0, t^1, s_X^0 \rangle$	52.72%	0.000	0.000	0.000
					$\langle 656 R^0, b^0, s_{\text{HB}}^2, s_{\text{free}}^0, t^0, s_X^0 \rangle$	0.38%	0.005	0.000	0.000
					$\langle 656 R^2, b^0, s_{\text{HB}}^1, s_{\text{free}}^0, t^0, s_X^0 \rangle$	0.18%	0.001	0.000	0.000
					$\langle 656 R^0, b^0, s_{\text{HB}}^1, s_{\text{free}}^0, t^0, s_X^0 \rangle$	0.00%	-0.002	0.000	0.000
5269.6	0.065	-0.002	-0.000	-0.000	$\langle 657 R^2, b^0, s_{\text{HB}}^0, s_{\text{free}}^0, t^3, s_X^1 \rangle$	26.43%	0.000	0.000	0.000
					$\langle 657 R^3, b^1, s_{\text{HB}}^0, s_{\text{free}}^0, t^2, s_X^0 \rangle$	5.39%	0.000	0.000	0.000

					$\langle 657 R^2, b^0, s_{\text{HB}}^1, s_{\text{free}}^0, t^0, s_X^0 \rangle$	0.41%	0.002	0.000	0.000
					$\langle 657 R^0, b^0, s_{\text{HB}}^2, s_{\text{free}}^0, t^0, s_X^0 \rangle$	0.15%	-0.003	0.000	0.000
					$\langle 657 R^0, b^0, s_{\text{HB}}^1, s_{\text{free}}^0, t^0, s_X^0 \rangle$	0.00%	-0.004	0.000	0.000
5274.4	0.142	0.003	0.000	0.000	$\langle 659 R^4, b^0, s_{\text{HB}}^0, s_{\text{free}}^0, t^3, s_X^0 \rangle$	16.51%	0.000	0.000	0.000
					$\langle 659 R^3, b^1, s_{\text{HB}}^0, s_{\text{free}}^0, t^1, s_X^0 \rangle$	13.15%	0.000	0.000	0.000
					$\langle 659 R^2, b^0, s_{\text{HB}}^0, s_{\text{free}}^0, t^3, s_X^1 \rangle$	7.16%	0.000	0.000	0.000
					$\langle 659 R^0, b^0, s_{\text{HB}}^2, s_{\text{free}}^0, t^0, s_X^0 \rangle$	0.90%	0.008	0.000	0.000
					$\langle 659 R^0, b^0, s_{\text{HB}}^2, s_{\text{free}}^0, t^1, s_X^0 \rangle$	0.28%	0.001	0.000	0.000
					$\langle 659 R^0, b^0, s_{\text{HB}}^1, s_{\text{free}}^0, t^0, s_X^0 \rangle$	0.01%	-0.004	0.000	0.000
5279.9	0.540	0.006	0.001	0.000	$\langle 660 R^3, b^1, s_{\text{HB}}^0, s_{\text{free}}^0, t^1, s_X^0 \rangle$	5.11%	0.000	0.000	0.000
					$\langle 660 R^0, b^0, s_{\text{HB}}^2, s_{\text{free}}^0, t^0, s_X^0 \rangle$	3.13%	0.014	0.001	-0.001
					$\langle 660 R^0, b^0, s_{\text{HB}}^2, s_{\text{free}}^0, t^1, s_X^0 \rangle$	0.62%	0.001	0.000	0.000
					$\langle 660 R^0, b^0, s_{\text{HB}}^1, s_{\text{free}}^0, t^0, s_X^0 \rangle$	0.02%	-0.007	-0.001	0.000
5283.3	0.298	-0.005	-0.001	-0.000	$\langle 661 R^4, b^0, s_{\text{HB}}^0, s_{\text{free}}^0, t^3, s_X^0 \rangle$	24.57%	0.000	0.000	0.000
					$\langle 661 R^0, b^0, s_{\text{HB}}^2, s_{\text{free}}^0, t^0, s_X^0 \rangle$	1.60%	-0.010	-0.001	0.001
					$\langle 661 R^2, b^0, s_{\text{HB}}^1, s_{\text{free}}^0, t^0, s_X^0 \rangle$	0.31%	-0.002	0.000	0.000
					$\langle 661 R^0, b^0, s_{\text{HB}}^1, s_{\text{free}}^0, t^0, s_X^0 \rangle$	0.02%	0.007	0.001	0.000
5292.8	0.056	-0.002	-0.000	-0.000	$\langle 664 R^4, b^0, s_{\text{HB}}^0, s_{\text{free}}^0, t^3, s_X^0 \rangle$	5.94%	0.000	0.000	0.000
					$\langle 664 R^0, b^0, s_{\text{HB}}^2, s_{\text{free}}^0, t^0, s_X^0 \rangle$	0.31%	-0.004	0.000	0.000
					$\langle 664 R^2, b^0, s_{\text{HB}}^1, s_{\text{free}}^0, t^0, s_X^0 \rangle$	0.11%	0.001	0.000	0.000
					$\langle 664 R^0, b^0, s_{\text{HB}}^1, s_{\text{free}}^0, t^0, s_X^0 \rangle$	0.00%	0.004	0.000	0.000
5301.1	0.051	-0.002	0.000	0.000	$\langle 669 R^4, b^0, s_{\text{HB}}^0, s_{\text{free}}^0, t^2, s_X^0 \rangle$	7.46%	0.000	0.000	0.000
					$\langle 669 R^1, b^1, s_{\text{HB}}^1, s_{\text{free}}^0, t^0, s_X^0 \rangle$	4.62%	0.001	0.000	-0.001
					$\langle 669 R^0, b^0, s_{\text{HB}}^2, s_{\text{free}}^0, t^0, s_X^0 \rangle$	0.03%	-0.002	0.000	0.000
					$\langle 669 R^0, b^0, s_{\text{HB}}^0, s_{\text{free}}^1, t^0, s_X^0 \rangle$	0.01%	-0.001	-0.001	-0.001
5312.5	0.118	0.003	0.000	0.000	$\langle 673 R^2, b^2, s_{\text{HB}}^0, s_{\text{free}}^0, t^1, s_X^0 \rangle$	18.12%	0.000	0.000	0.000
					$\langle 673 R^0, b^0, s_{\text{HB}}^2, s_{\text{free}}^0, t^0, s_X^0 \rangle$	0.54%	0.006	0.000	0.000
					$\langle 673 R^2, b^0, s_{\text{HB}}^1, s_{\text{free}}^0, t^0, s_X^0 \rangle$	0.38%	-0.001	0.000	0.000
					$\langle 673 R^0, b^0, s_{\text{HB}}^1, s_{\text{free}}^0, t^0, s_X^0 \rangle$	0.00%	-0.002	0.000	0.000
5314.8	0.102	-0.003	-0.000	-0.000	$\langle 674 R^2, b^2, s_{\text{HB}}^0, s_{\text{free}}^0, t^1, s_X^0 \rangle$	9.42%	0.000	0.000	0.000
					$\langle 674 R^4, b^0, s_{\text{HB}}^0, s_{\text{free}}^0, t^3, s_X^0 \rangle$	5.80%	0.000	0.000	0.000
					$\langle 674 R^0, b^0, s_{\text{HB}}^2, s_{\text{free}}^0, t^0, s_X^0 \rangle$	0.64%	-0.007	0.000	0.000
					$\langle 674 R^0, b^0, s_{\text{HB}}^2, s_{\text{free}}^0, t^1, s_X^0 \rangle$	0.20%	-0.001	0.000	0.000
					$\langle 674 R^0, b^0, s_{\text{HB}}^1, s_{\text{free}}^0, t^0, s_X^0 \rangle$	0.00%	0.004	0.000	0.000
5331.3	0.113	0.003	0.000	0.000	$\langle 681 R^2, b^0, s_{\text{HB}}^0, s_{\text{free}}^1, t^0, s_X^0 \rangle$	17.63%	-0.002	-0.002	-0.003
					$\langle 681 R^0, b^1, s_{\text{HB}}^0, s_{\text{free}}^1, t^1, s_X^0 \rangle$	12.51%	0.000	0.001	0.000
					$\langle 681 R^4, b^0, s_{\text{HB}}^0, s_{\text{free}}^0, t^3, s_X^0 \rangle$	5.90%	0.000	0.000	0.000
					$\langle 681 R^0, b^0, s_{\text{HB}}^0, s_{\text{free}}^1, t^0, s_X^0 \rangle$	0.21%	0.003	0.007	0.004
					$\langle 681 R^0, b^0, s_{\text{HB}}^1, s_{\text{free}}^0, t^0, s_X^0 \rangle$	0.00%	-0.003	0.000	0.000
5334.3	0.188	0.004	0.000	0.001	$\langle 682 R^2, b^0, s_{\text{HB}}^0, s_{\text{free}}^1, t^0, s_X^0 \rangle$	21.09%	-0.002	-0.002	-0.004
					$\langle 682 R^0, b^1, s_{\text{HB}}^0, s_{\text{free}}^1, t^1, s_X^0 \rangle$	15.29%	0.001	0.001	0.000
					$\langle 682 R^4, b^0, s_{\text{HB}}^0, s_{\text{free}}^0, t^3, s_X^0 \rangle$	6.03%	0.000	0.000	0.000

					$\langle 682 R^0, b^0, s_{\text{HB}}^0, s_{\text{free}}^1, t^0, s_X^0 \rangle$	0.23%	0.003	0.007	0.004
					$\langle 682 R^0, b^0, s_{\text{HB}}^1, s_{\text{free}}^0, t^0, s_X^0 \rangle$	0.01%	-0.005	0.000	0.000
5345.1	0.052	0.002	0.000	0.000	$\langle 684 R^0, b^1, s_{\text{HB}}^0, s_{\text{free}}^1, t^1, s_X^0 \rangle$	51.31%	-0.001	-0.001	-0.001
					$\langle 684 R^2, b^0, s_{\text{HB}}^0, s_{\text{free}}^1, t^0, s_X^0 \rangle$	19.78%	-0.002	-0.002	-0.004
					$\langle 684 R^0, b^0, s_{\text{HB}}^0, s_{\text{free}}^1, t^0, s_X^0 \rangle$	0.28%	0.004	0.008	0.005
					$\langle 684 R^0, b^0, s_{\text{HB}}^1, s_{\text{free}}^0, t^0, s_X^0 \rangle$	0.00%	-0.002	0.000	0.000
5365.0	0.081	0.002	0.000	0.000	$\langle 695 R^5, b^0, s_{\text{HB}}^0, s_{\text{free}}^0, t^0, s_X^0 \rangle$	4.39%	0.000	0.000	0.000
					$\langle 695 R^0, b^0, s_{\text{HB}}^2, s_{\text{free}}^0, t^0, s_X^0 \rangle$	0.72%	0.007	0.000	0.000
					$\langle 695 R^0, b^0, s_{\text{HB}}^2, s_{\text{free}}^0, t^1, s_X^0 \rangle$	0.62%	0.001	0.000	0.000
					$\langle 695 R^0, b^0, s_{\text{HB}}^1, s_{\text{free}}^0, t^0, s_X^0 \rangle$	0.01%	-0.006	-0.001	0.000
5365.7	0.158	-0.003	-0.000	-0.000	$\langle 696 R^3, b^1, s_{\text{HB}}^0, s_{\text{free}}^0, t^2, s_X^0 \rangle$	9.52%	0.000	0.000	0.000
					$\langle 696 R^0, b^0, s_{\text{HB}}^2, s_{\text{free}}^0, t^0, s_X^0 \rangle$	1.38%	-0.010	-0.001	0.001
					$\langle 696 R^0, b^0, s_{\text{HB}}^2, s_{\text{free}}^0, t^1, s_X^0 \rangle$	1.23%	-0.002	0.000	0.000
					$\langle 696 R^0, b^0, s_{\text{HB}}^1, s_{\text{free}}^0, t^0, s_X^0 \rangle$	0.01%	0.006	0.001	0.000
5385.4	0.102	-0.003	-0.000	-0.000	$\langle 706 R^3, b^1, s_{\text{HB}}^0, s_{\text{free}}^0, t^3, s_X^0 \rangle$	5.19%	0.000	0.000	0.000
					$\langle 706 R^0, b^0, s_{\text{HB}}^2, s_{\text{free}}^0, t^1, s_X^0 \rangle$	1.77%	-0.003	0.000	0.000
					$\langle 706 R^0, b^0, s_{\text{HB}}^2, s_{\text{free}}^0, t^0, s_X^0 \rangle$	1.07%	-0.008	-0.001	0.000
					$\langle 706 R^0, b^0, s_{\text{HB}}^1, s_{\text{free}}^0, t^0, s_X^0 \rangle$	0.02%	0.007	0.001	0.000
5474.8	0.060	-0.002	-0.000	-0.000	$\langle 743 R^4, b^1, s_{\text{HB}}^0, s_{\text{free}}^0, t^0, s_X^0 \rangle$	15.07%	0.000	0.000	0.000
					$\langle 743 R^2, b^2, s_{\text{HB}}^0, s_{\text{free}}^0, t^0, s_X^0 \rangle$	6.74%	0.000	0.000	0.000
					$\langle 743 R^3, b^0, s_{\text{HB}}^1, s_{\text{free}}^0, t^0, s_X^0 \rangle$	1.36%	0.000	-0.001	0.002
					$\langle 743 R^0, b^0, s_{\text{HB}}^2, s_{\text{free}}^0, t^0, s_X^0 \rangle$	0.09%	-0.002	0.000	0.000
					$\langle 743 R^0, b^0, s_{\text{HB}}^1, s_{\text{free}}^0, t^0, s_X^0 \rangle$	0.00%	0.004	0.000	0.000
5478.0	0.070	-0.002	0.000	-0.000	$\langle 744 R^2, b^0, s_{\text{HB}}^0, s_{\text{free}}^1, t^0, s_X^0 \rangle$	19.08%	0.001	0.001	0.001
					$\langle 744 R^0, b^0, s_{\text{HB}}^2, s_{\text{free}}^0, t^0, s_X^0 \rangle$	0.42%	-0.005	0.000	0.000
					$\langle 744 R^1, b^0, s_{\text{HB}}^0, s_{\text{free}}^0, t^0, s_X^0 \rangle$	0.00%	-0.001	0.001	-0.001
					$\langle 744 R^0, b^0, s_{\text{HB}}^1, s_{\text{free}}^0, t^0, s_X^0 \rangle$	0.00%	0.002	0.000	0.000
5505.9	0.256	0.004	0.000	0.000	$\langle 759 R^2, b^0, s_{\text{HB}}^1, s_{\text{free}}^0, t^4, s_X^0 \rangle$	4.09%	0.000	0.000	0.000
					$\langle 759 R^0, b^0, s_{\text{HB}}^2, s_{\text{free}}^0, t^1, s_X^0 \rangle$	3.37%	0.003	0.000	0.000
					$\langle 759 R^0, b^0, s_{\text{HB}}^2, s_{\text{free}}^0, t^0, s_X^0 \rangle$	2.01%	0.012	0.001	-0.001
					$\langle 759 R^0, b^0, s_{\text{HB}}^1, s_{\text{free}}^0, t^0, s_X^0 \rangle$	0.04%	-0.011	-0.001	0.000
5747.7	0.085	0.002	0.000	0.000	$\langle 875 R^0, b^2, s_{\text{HB}}^1, s_{\text{free}}^0, t^0, s_X^0 \rangle$	15.45%	-0.004	0.000	0.000
					$\langle 875 R^0, b^0, s_{\text{HB}}^2, s_{\text{free}}^0, t^0, s_X^0 \rangle$	0.15%	0.003	0.000	0.000
					$\langle 875 R^0, b^0, s_{\text{HB}}^1, s_{\text{free}}^0, t^0, s_X^0 \rangle$	0.01%	0.004	0.000	0.000
6983.5	0.075	0.001	0.002	0.001	$\langle 1712 R^3, b^0, s_{\text{HB}}^0, s_{\text{free}}^1, t^0, s_X^0 \rangle$	34.04%	0.000	0.000	0.000
					$\langle 1712 R^0, b^0, s_{\text{HB}}^0, s_{\text{free}}^2, t^0, s_X^0 \rangle$	2.46%	0.002	0.003	0.002
					$\langle 1712 R^0, b^0, s_{\text{HB}}^0, s_{\text{free}}^1, t^0, s_X^0 \rangle$	0.01%	-0.001	-0.001	-0.001
					$\langle 1712 R^0, b^0, s_{\text{HB}}^1, s_{\text{free}}^0, t^0, s_X^0 \rangle$	0.00%	-0.001	0.000	0.000
6999.3	0.110	0.000	0.002	0.001	$\langle 1726 R^2, b^1, s_{\text{HB}}^0, s_{\text{free}}^1, t^0, s_X^0 \rangle$	12.65%	-0.001	0.002	0.000
					$\langle 1726 R^3, b^0, s_{\text{HB}}^0, s_{\text{free}}^1, t^0, s_X^0 \rangle$	6.29%	0.000	0.000	0.000
					$\langle 1726 R^0, b^0, s_{\text{HB}}^0, s_{\text{free}}^2, t^0, s_X^0 \rangle$	2.85%	0.002	0.004	0.002

MeOH₂ ··· Ar₂

ω	I	μ_x	μ_y	μ_z	Assignment	$ c_n ^2$	$\mu_x^{g \rightarrow n}$	$\mu_y^{g \rightarrow n}$	$\mu_z^{g \rightarrow n}$
4049.5	0.087	-0.003	0.001	0.000	$\langle 911 R^2, b^1, s_{\text{sym}}^0, s_{\text{asym}}^0, t^3 \rangle$	65.99%	0.000	0.000	0.000
					$\langle 911 R^1, b^0, s_{\text{sym}}^1, s_{\text{asym}}^0, t^0 \rangle$	4.36%	0.004	0.003	0.000
					$\langle 911 R^1, b^0, s_{\text{sym}}^0, s_{\text{asym}}^0, t^0 \rangle$	0.03%	-0.005	-0.001	0.000
					$\langle 911 R^0, b^0, s_{\text{sym}}^1, s_{\text{asym}}^0, t^0 \rangle$	0.02%	0.001	-0.003	0.000
4049.6	0.543	-0.007	0.003	-0.000	$\langle 912 R^1, b^0, s_{\text{sym}}^1, s_{\text{asym}}^0, t^0 \rangle$	27.13%	0.011	0.008	0.000
					$\langle 912 R^1, b^2, s_{\text{sym}}^0, s_{\text{asym}}^0, t^0 \rangle$	16.93%	0.003	0.002	0.000
					$\langle 912 R^3, b^1, s_{\text{sym}}^0, s_{\text{asym}}^0, t^0 \rangle$	13.37%	-0.006	-0.002	0.000
					$\langle 912 R^1, b^0, s_{\text{sym}}^0, s_{\text{asym}}^0, t^0 \rangle$	0.19%	-0.013	-0.003	0.000
					$\langle 912 R^0, b^0, s_{\text{sym}}^1, s_{\text{asym}}^0, t^0 \rangle$	0.11%	0.002	-0.008	0.000
4068.6	0.596	-0.000	-0.000	-0.008	$\langle 923 R^4, b^0, s_{\text{sym}}^0, s_{\text{asym}}^0, t^0 \rangle$	59.05%	0.000	0.000	0.000
					$\langle 923 R^1, b^0, s_{\text{sym}}^0, s_{\text{asym}}^1, t^0 \rangle$	20.30%	0.000	0.000	-0.010
					$\langle 923 R^2, b^0, s_{\text{sym}}^0, s_{\text{asym}}^1, t^0 \rangle$	0.60%	0.000	0.000	-0.002
					$\langle 923 R^0, b^0, s_{\text{sym}}^0, s_{\text{asym}}^1, t^0 \rangle$	0.02%	0.000	0.000	0.005
4082.9	1.624	0.000	-0.000	-0.013	$\langle 930 R^1, b^0, s_{\text{sym}}^0, s_{\text{asym}}^1, t^0 \rangle$	55.74%	0.000	0.000	-0.017
					$\langle 930 R^4, b^0, s_{\text{sym}}^0, s_{\text{asym}}^0, t^0 \rangle$	14.63%	0.000	0.000	0.000
					$\langle 930 R^0, b^0, s_{\text{sym}}^1, s_{\text{asym}}^1, t^0 \rangle$	0.24%	0.000	0.000	0.003
					$\langle 930 R^0, b^0, s_{\text{sym}}^0, s_{\text{asym}}^1, t^0 \rangle$	0.04%	0.000	0.000	0.008
4126.8	1.146	-0.009	0.006	0.000	$\langle 961 R^1, b^0, s_{\text{sym}}^1, s_{\text{asym}}^0, t^0 \rangle$	38.78%	0.013	0.010	0.000
					$\langle 961 R^1, b^2, s_{\text{sym}}^0, s_{\text{asym}}^0, t^0 \rangle$	22.26%	-0.003	-0.002	0.000
					$\langle 961 R^1, b^0, s_{\text{sym}}^0, s_{\text{asym}}^1, t^1 \rangle$	6.49%	0.000	0.000	0.000
					$\langle 961 R^3, b^1, s_{\text{sym}}^0, s_{\text{asym}}^0, t^0 \rangle$	5.34%	0.004	0.001	0.000
					$\langle 961 R^3, b^0, s_{\text{sym}}^0, s_{\text{asym}}^0, t^0 \rangle$	5.15%	-0.010	-0.003	0.000
					$\langle 961 R^1, b^0, s_{\text{sym}}^0, s_{\text{asym}}^0, t^0 \rangle$	0.13%	-0.011	-0.003	0.000
4180.4	0.111	-0.003	0.001	0.000	$\langle 994 R^1, b^0, s_{\text{sym}}^0, s_{\text{asym}}^1, t^1 \rangle$	52.64%	0.001	0.000	0.000
					$\langle 994 R^1, b^2, s_{\text{sym}}^0, s_{\text{asym}}^0, t^2 \rangle$	13.20%	0.000	0.000	0.000
					$\langle 994 R^1, b^0, s_{\text{sym}}^1, s_{\text{asym}}^0, t^0 \rangle$	3.64%	0.004	0.003	0.000
					$\langle 994 R^3, b^0, s_{\text{sym}}^0, s_{\text{asym}}^0, t^0 \rangle$	0.32%	-0.003	-0.001	0.000
					$\langle 994 R^1, b^0, s_{\text{sym}}^0, s_{\text{asym}}^0, t^0 \rangle$	0.04%	-0.006	-0.001	0.000

4201.7	0.138	0.000	0.000	0.004	$\langle 1006 R^1, b^2, s_{\text{sym}}^0, s_{\text{asym}}^0, t^0 \rangle$	31.90%	0.000	0.000	-0.001
					$\langle 1006 R^1, b^2, s_{\text{sym}}^0, s_{\text{asym}}^0, t^1 \rangle$	9.55%	0.000	0.000	0.000
					$\langle 1006 R^1, b^0, s_{\text{sym}}^1, s_{\text{asym}}^0, t^0 \rangle$	5.26%	0.000	0.000	-0.001
					$\langle 1006 R^5, b^0, s_{\text{sym}}^0, s_{\text{asym}}^0, t^0 \rangle$	5.03%	0.000	0.000	0.000
					$\langle 1006 R^0, b^1, s_{\text{sym}}^0, s_{\text{asym}}^1, t^0 \rangle$	1.53%	0.000	0.000	0.003
					$\langle 1006 R^2, b^0, s_{\text{sym}}^0, s_{\text{asym}}^1, t^0 \rangle$	0.40%	0.000	0.000	-0.002
					$\langle 1006 R^0, b^0, s_{\text{sym}}^0, s_{\text{asym}}^1, t^0 \rangle$	0.00%	0.000	0.000	0.002
4335.3	1.056	0.008	-0.005	0.000	$\langle 1076 R^1, b^0, s_{\text{sym}}^0, s_{\text{asym}}^1, t^0 \rangle$	67.15%	-0.004	-0.003	0.000
					$\langle 1076 R^1, b^0, s_{\text{sym}}^1, s_{\text{asym}}^0, t^1 \rangle$	6.02%	0.000	0.000	0.000
					$\langle 1076 R^1, b^0, s_{\text{sym}}^0, s_{\text{asym}}^0, t^0 \rangle$	0.07%	0.008	0.002	0.000
4360.3	0.128	0.003	-0.002	0.000	$\langle 1093 R^3, b^1, s_{\text{sym}}^0, s_{\text{asym}}^0, t^1 \rangle$	24.97%	0.000	0.000	0.000
					$\langle 1093 R^1, b^2, s_{\text{sym}}^0, s_{\text{asym}}^0, t^1 \rangle$	9.85%	0.000	0.000	0.000
					$\langle 1093 R^1, b^0, s_{\text{sym}}^1, s_{\text{asym}}^0, t^1 \rangle$	9.18%	0.000	0.000	0.000
					$\langle 1093 R^4, b^0, s_{\text{sym}}^0, s_{\text{asym}}^0, t^2 \rangle$	5.36%	0.000	0.000	0.000
					$\langle 1093 R^1, b^0, s_{\text{sym}}^0, s_{\text{asym}}^1, t^0 \rangle$	5.11%	-0.001	-0.002	0.000
					$\langle 1093 R^1, b^0, s_{\text{sym}}^0, s_{\text{asym}}^0, t^0 \rangle$	0.01%	0.002	0.001	0.000
					$\langle 1093 R^0, b^1, s_{\text{sym}}^0, s_{\text{asym}}^0, t^0 \rangle$	0.01%	0.000	-0.001	0.000
4428.5	0.062	0.002	-0.001	0.000	$\langle 1133 R^1, b^0, s_{\text{sym}}^0, s_{\text{asym}}^1, t^1 \rangle$	63.56%	0.000	-0.001	0.000
					$\langle 1133 R^1, b^0, s_{\text{sym}}^1, s_{\text{asym}}^0, t^1 \rangle$	6.30%	0.000	0.000	0.000
					$\langle 1133 R^1, b^0, s_{\text{sym}}^0, s_{\text{asym}}^1, t^0 \rangle$	2.24%	0.000	-0.001	0.000
					$\langle 1133 R^1, b^0, s_{\text{sym}}^0, s_{\text{asym}}^0, t^0 \rangle$	0.00%	0.002	0.000	0.000
4552.0	0.068	0.001	-0.002	0.000	$\langle 1214 R^1, b^0, s_{\text{sym}}^1, s_{\text{asym}}^0, t^0 \rangle$	67.16%	-0.001	-0.003	0.000
					$\langle 1214 R^1, b^2, s_{\text{sym}}^0, s_{\text{asym}}^0, t^0 \rangle$	9.71%	0.000	0.000	0.000
					$\langle 1214 R^1, b^0, s_{\text{sym}}^0, s_{\text{asym}}^0, t^0 \rangle$	0.01%	0.003	0.001	0.000
					$\langle 1214 R^0, b^0, s_{\text{sym}}^1, s_{\text{asym}}^0, t^0 \rangle$	0.01%	-0.001	0.003	0.000
4554.2	0.211	0.000	-0.000	-0.004	$\langle 1215 R^1, b^0, s_{\text{sym}}^0, s_{\text{asym}}^1, t^0 \rangle$	70.09%	0.000	0.000	-0.001
					$\langle 1215 R^1, b^0, s_{\text{sym}}^1, s_{\text{asym}}^0, t^1 \rangle$	7.17%	0.000	0.000	0.000
					$\langle 1215 R^2, b^0, s_{\text{sym}}^0, s_{\text{asym}}^1, t^0 \rangle$	1.35%	0.000	0.000	-0.003
					$\langle 1215 R^0, b^1, s_{\text{sym}}^0, s_{\text{asym}}^1, t^0 \rangle$	1.26%	0.000	0.000	-0.003
					$\langle 1215 R^0, b^0, s_{\text{sym}}^0, s_{\text{asym}}^1, t^0 \rangle$	0.02%	0.000	0.000	0.005
4669.2	0.756	0.006	-0.005	0.000	$\langle 1296 R^1, b^0, s_{\text{sym}}^0, s_{\text{asym}}^1, t^0 \rangle$	63.37%	0.001	-0.006	0.000
					$\langle 1296 R^1, b^0, s_{\text{sym}}^1, s_{\text{asym}}^0, t^1 \rangle$	6.38%	0.000	0.000	0.000
					$\langle 1296 R^1, b^0, s_{\text{sym}}^0, s_{\text{asym}}^0, t^0 \rangle$	0.03%	0.006	0.001	0.000
4673.7	0.122	0.000	-0.000	0.003	$\langle 1298 R^1, b^0, s_{\text{sym}}^1, s_{\text{asym}}^0, t^0 \rangle$	24.43%	0.000	0.000	0.002
					$\langle 1298 R^1, b^2, s_{\text{sym}}^0, s_{\text{asym}}^0, t^0 \rangle$	20.56%	0.000	0.000	0.000
					$\langle 1298 R^3, b^1, s_{\text{sym}}^0, s_{\text{asym}}^0, t^0 \rangle$	12.07%	0.000	0.000	0.000
					$\langle 1298 R^5, b^0, s_{\text{sym}}^0, s_{\text{asym}}^0, t^0 \rangle$	10.48%	0.000	0.000	0.000
					$\langle 1298 R^2, b^0, s_{\text{sym}}^0, s_{\text{asym}}^1, t^0 \rangle$	1.81%	0.000	0.000	-0.004
					$\langle 1298 R^0, b^0, s_{\text{sym}}^0, s_{\text{asym}}^1, t^0 \rangle$	0.01%	0.000	0.000	0.004
4688.9	0.151	-0.003	0.002	-0.000	$\langle 1314 R^3, b^1, s_{\text{sym}}^0, s_{\text{asym}}^0, t^1 \rangle$	21.48%	0.000	0.000	0.000
					$\langle 1314 R^1, b^2, s_{\text{sym}}^0, s_{\text{asym}}^0, t^1 \rangle$	13.22%	0.000	0.000	0.000

					$\langle 1314 R^1, b^0, s_{\text{sym}}^0, s_{\text{asym}}^1, t^0 \rangle$	11.66%	0.000	0.002	0.000
					$\langle 1314 R^1, b^0, s_{\text{sym}}^1, s_{\text{asym}}^0, t^1 \rangle$	7.15%	0.000	0.000	0.000
					$\langle 1314 R^5, b^0, s_{\text{sym}}^0, s_{\text{asym}}^0, t^1 \rangle$	6.02%	0.000	0.000	0.000
					$\langle 1314 R^1, b^0, s_{\text{sym}}^0, s_{\text{asym}}^0, t^0 \rangle$	0.01%	-0.002	-0.001	0.000
4947.5	0.101	0.000	-0.000	0.003	$\langle 1515 R^5, b^0, s_{\text{sym}}^0, s_{\text{asym}}^0, t^1 \rangle$	56.98%	0.000	0.000	0.000
					$\langle 1515 R^0, b^1, s_{\text{sym}}^0, s_{\text{asym}}^1, t^0 \rangle$	0.99%	0.000	0.000	0.003
					$\langle 1515 R^2, b^0, s_{\text{sym}}^0, s_{\text{asym}}^1, t^0 \rangle$	0.20%	0.000	0.000	-0.001
					$\langle 1515 R^0, b^0, s_{\text{sym}}^0, s_{\text{asym}}^1, t^0 \rangle$	0.00%	0.000	0.000	0.001
4951.0	0.352	-0.000	0.000	-0.005	$\langle 1518 R^5, b^0, s_{\text{sym}}^0, s_{\text{asym}}^0, t^1 \rangle$	37.69%	0.000	0.000	0.000
					$\langle 1518 R^0, b^3, s_{\text{sym}}^0, s_{\text{asym}}^0, t^2 \rangle$	8.32%	0.000	0.000	0.000
					$\langle 1518 R^0, b^1, s_{\text{sym}}^0, s_{\text{asym}}^1, t^0 \rangle$	3.63%	0.000	0.000	-0.005
					$\langle 1518 R^2, b^0, s_{\text{sym}}^0, s_{\text{asym}}^1, t^0 \rangle$	0.56%	0.000	0.000	0.002
					$\langle 1518 R^0, b^0, s_{\text{sym}}^0, s_{\text{asym}}^1, t^0 \rangle$	0.00%	0.000	0.000	-0.002
4955.1	0.373	-0.000	0.000	-0.005	$\langle 1520 R^1, b^0, s_{\text{sym}}^0, s_{\text{asym}}^1, t^5 \rangle$	37.36%	0.000	0.000	0.000
					$\langle 1520 R^0, b^1, s_{\text{sym}}^1, s_{\text{asym}}^0, t^1 \rangle$	11.44%	0.000	0.000	0.000
					$\langle 1520 R^2, b^2, s_{\text{sym}}^0, s_{\text{asym}}^0, t^1 \rangle$	6.64%	0.000	0.000	0.000
					$\langle 1520 R^0, b^1, s_{\text{sym}}^0, s_{\text{asym}}^1, t^0 \rangle$	4.00%	0.000	0.000	-0.005
					$\langle 1520 R^2, b^0, s_{\text{sym}}^0, s_{\text{asym}}^1, t^0 \rangle$	0.50%	0.000	0.000	0.002
					$\langle 1520 R^0, b^0, s_{\text{sym}}^0, s_{\text{asym}}^1, t^0 \rangle$	0.00%	0.000	0.000	-0.003
4955.3	0.568	-0.000	0.000	-0.007	$\langle 1521 R^1, b^0, s_{\text{sym}}^0, s_{\text{asym}}^1, t^5 \rangle$	33.92%	0.000	0.000	0.000
					$\langle 1521 R^0, b^1, s_{\text{sym}}^1, s_{\text{asym}}^0, t^1 \rangle$	14.68%	0.000	0.000	0.000
					$\langle 1521 R^2, b^2, s_{\text{sym}}^0, s_{\text{asym}}^0, t^1 \rangle$	8.61%	0.000	0.000	0.000
					$\langle 1521 R^0, b^1, s_{\text{sym}}^0, s_{\text{asym}}^1, t^0 \rangle$	6.04%	0.000	0.000	-0.006
					$\langle 1521 R^2, b^0, s_{\text{sym}}^0, s_{\text{asym}}^1, t^0 \rangle$	0.78%	0.000	0.000	0.003
					$\langle 1521 R^0, b^0, s_{\text{sym}}^0, s_{\text{asym}}^1, t^0 \rangle$	0.01%	0.000	0.000	-0.003
4957.8	0.340	0.000	-0.000	0.005	$\langle 1523 R^0, b^3, s_{\text{sym}}^0, s_{\text{asym}}^0, t^2 \rangle$	36.75%	0.000	0.000	0.000
					$\langle 1523 R^0, b^1, s_{\text{sym}}^1, s_{\text{asym}}^0, t^2 \rangle$	14.01%	0.000	0.000	0.000
					$\langle 1523 R^2, b^2, s_{\text{sym}}^0, s_{\text{asym}}^0, t^2 \rangle$	8.43%	0.000	0.000	0.000
					$\langle 1523 R^0, b^1, s_{\text{sym}}^0, s_{\text{asym}}^1, t^0 \rangle$	3.48%	0.000	0.000	0.005
					$\langle 1523 R^2, b^0, s_{\text{sym}}^0, s_{\text{asym}}^1, t^0 \rangle$	0.54%	0.000	0.000	-0.002
					$\langle 1523 R^0, b^0, s_{\text{sym}}^0, s_{\text{asym}}^1, t^0 \rangle$	0.00%	0.000	0.000	0.003
4977.2	4.834	0.000	-0.000	0.020	$\langle 1539 R^0, b^1, s_{\text{sym}}^0, s_{\text{asym}}^1, t^0 \rangle$	52.91%	0.000	0.000	0.019
					$\langle 1539 R^2, b^2, s_{\text{sym}}^0, s_{\text{asym}}^0, t^1 \rangle$	7.06%	0.000	0.000	0.000
					$\langle 1539 R^0, b^1, s_{\text{sym}}^1, s_{\text{asym}}^0, t^1 \rangle$	6.77%	0.000	0.000	0.000
					$\langle 1539 R^2, b^0, s_{\text{sym}}^0, s_{\text{asym}}^1, t^0 \rangle$	3.76%	0.000	0.000	-0.006
					$\langle 1539 R^0, b^0, s_{\text{sym}}^0, s_{\text{asym}}^1, t^0 \rangle$	0.03%	0.000	0.000	0.007
5105.3	0.050	0.000	0.000	-0.002	$\langle 1645 R^0, b^1, s_{\text{sym}}^1, s_{\text{asym}}^0, t^1 \rangle$	20.54%	0.000	0.000	0.000
					$\langle 1645 R^2, b^0, s_{\text{sym}}^1, s_{\text{asym}}^0, t^1 \rangle$	12.06%	0.000	0.000	0.004
					$\langle 1645 R^0, b^3, s_{\text{sym}}^0, s_{\text{asym}}^0, t^1 \rangle$	9.03%	0.000	0.000	0.000
					$\langle 1645 R^0, b^1, s_{\text{sym}}^0, s_{\text{asym}}^1, t^0 \rangle$	0.52%	0.000	0.000	-0.002
					$\langle 1645 R^0, b^0, s_{\text{sym}}^0, s_{\text{asym}}^1, t^1 \rangle$	0.01%	0.000	0.000	-0.003
6449.2	0.112	0.002	-0.002	0.000	$\langle 2934 R^0, b^2, s_{\text{sym}}^1, s_{\text{asym}}^0, t^0 \rangle$	14.63%	0.000	-0.002	0.000

					$\langle 2934 R^2, b^3, s_{\text{sym}}^0, s_{\text{asym}}^0, t^0 \rangle$	12.63%	0.000	0.000	0.000
					$\langle 2934 R^0, b^0, s_{\text{sym}}^2, s_{\text{asym}}^0, t^0 \rangle$	7.73%	0.000	-0.002	0.000
					$\langle 2934 R^0, b^4, s_{\text{sym}}^0, s_{\text{asym}}^0, t^1 \rangle$	6.25%	0.000	0.000	0.000
					$\langle 2934 R^5, b^1, s_{\text{sym}}^0, s_{\text{asym}}^0, t^0 \rangle$	5.58%	0.000	0.000	0.000
					$\langle 2934 R^3, b^0, s_{\text{sym}}^1, s_{\text{asym}}^0, t^0 \rangle$	5.13%	0.000	0.000	0.000
					$\langle 2934 R^0, b^0, s_{\text{sym}}^0, s_{\text{asym}}^2, t^0 \rangle$	1.00%	-0.001	0.003	0.000
					$\langle 2934 R^0, b^0, s_{\text{sym}}^1, s_{\text{asym}}^0, t^0 \rangle$	0.05%	0.001	-0.006	0.000
					$\langle 2934 R^1, b^0, s_{\text{sym}}^0, s_{\text{asym}}^0, t^0 \rangle$	0.01%	-0.002	-0.001	0.000
6481.5	0.345	0.000	-0.000	-0.005	$\langle 2962 R^0, b^0, s_{\text{sym}}^1, s_{\text{asym}}^1, t^0 \rangle$	18.97%	0.000	0.000	0.027
					$\langle 2962 R^4, b^0, s_{\text{sym}}^0, s_{\text{asym}}^1, t^0 \rangle$	9.29%	0.000	0.000	0.002
					$\langle 2962 R^5, b^1, s_{\text{sym}}^0, s_{\text{asym}}^0, t^0 \rangle$	7.31%	0.000	0.000	0.000
					$\langle 2962 R^0, b^2, s_{\text{sym}}^0, s_{\text{asym}}^1, t^0 \rangle$	6.92%	0.000	0.000	-0.003
					$\langle 2962 R^0, b^0, s_{\text{sym}}^0, s_{\text{asym}}^1, t^0 \rangle$	0.91%	0.000	0.000	-0.037
6502.0	0.286	0.000	-0.000	0.004	$\langle 2992 R^3, b^2, s_{\text{sym}}^0, s_{\text{asym}}^0, t^0 \rangle$	14.05%	0.000	0.000	0.000
					$\langle 2992 R^0, b^0, s_{\text{sym}}^1, s_{\text{asym}}^1, t^0 \rangle$	12.74%	0.000	0.000	-0.022
					$\langle 2992 R^5, b^1, s_{\text{sym}}^0, s_{\text{asym}}^0, t^0 \rangle$	5.54%	0.000	0.000	0.000
					$\langle 2992 R^0, b^0, s_{\text{sym}}^0, s_{\text{asym}}^1, t^0 \rangle$	0.72%	0.000	0.000	0.033
					$\langle 2992 R^0, b^0, s_{\text{sym}}^0, s_{\text{asym}}^3, t^0 \rangle$	0.58%	0.000	0.000	-0.002
6506.4	0.093	-0.000	0.000	-0.002	$\langle 3000 R^3, b^2, s_{\text{sym}}^0, s_{\text{asym}}^0, t^0 \rangle$	16.06%	0.000	0.000	0.000
					$\langle 3000 R^0, b^0, s_{\text{sym}}^1, s_{\text{asym}}^1, t^0 \rangle$	4.02%	0.000	0.000	0.013
					$\langle 3000 R^2, b^1, s_{\text{sym}}^0, s_{\text{asym}}^1, t^0 \rangle$	2.31%	0.000	0.000	0.002
					$\langle 3000 R^0, b^0, s_{\text{sym}}^0, s_{\text{asym}}^1, t^0 \rangle$	0.27%	0.000	0.000	-0.020
6509.8	0.305	-0.003	0.003	0.000	$\langle 3005 R^2, b^0, s_{\text{sym}}^0, s_{\text{asym}}^1, t^4 \rangle$	24.66%	0.000	0.000	0.000
					$\langle 3005 R^0, b^0, s_{\text{sym}}^2, s_{\text{asym}}^0, t^0 \rangle$	11.32%	0.000	0.002	0.000
					$\langle 3005 R^0, b^0, s_{\text{sym}}^0, s_{\text{asym}}^2, t^0 \rangle$	8.31%	0.002	-0.010	0.000
					$\langle 3005 R^0, b^0, s_{\text{sym}}^1, s_{\text{asym}}^1, t^1 \rangle$	5.13%	0.000	-0.001	0.000
					$\langle 3005 R^0, b^0, s_{\text{sym}}^1, s_{\text{asym}}^2, t^0 \rangle$	3.29%	0.001	-0.003	0.000
					$\langle 3005 R^0, b^0, s_{\text{sym}}^1, s_{\text{asym}}^0, t^0 \rangle$	0.45%	-0.004	0.017	0.000
6510.2	0.219	0.002	-0.003	-0.000	$\langle 3007 R^2, b^0, s_{\text{sym}}^0, s_{\text{asym}}^1, t^4 \rangle$	41.07%	0.000	0.000	0.000
					$\langle 3007 R^0, b^0, s_{\text{sym}}^2, s_{\text{asym}}^0, t^0 \rangle$	8.11%	0.000	-0.002	0.000
					$\langle 3007 R^0, b^0, s_{\text{sym}}^0, s_{\text{asym}}^2, t^0 \rangle$	5.93%	-0.002	0.008	0.000
					$\langle 3007 R^0, b^0, s_{\text{sym}}^1, s_{\text{asym}}^2, t^0 \rangle$	2.35%	-0.001	0.003	0.000
					$\langle 3007 R^0, b^0, s_{\text{sym}}^1, s_{\text{asym}}^0, t^0 \rangle$	0.32%	0.003	-0.014	0.000
6514.5	0.077	-0.000	0.000	0.002	$\langle 3014 R^3, b^2, s_{\text{sym}}^0, s_{\text{asym}}^0, t^0 \rangle$	39.46%	0.000	0.000	0.000
					$\langle 3014 R^0, b^0, s_{\text{sym}}^1, s_{\text{asym}}^1, t^0 \rangle$	3.12%	0.000	0.000	-0.011
					$\langle 3014 R^0, b^0, s_{\text{sym}}^0, s_{\text{asym}}^1, t^0 \rangle$	0.21%	0.000	0.000	0.018
					$\langle 3014 R^2, b^0, s_{\text{sym}}^0, s_{\text{asym}}^1, t^0 \rangle$	0.18%	0.000	0.000	-0.001
6542.3	0.134	0.002	-0.002	0.000	$\langle 3041 R^0, b^2, s_{\text{sym}}^0, s_{\text{asym}}^1, t^1 \rangle$	24.97%	0.000	0.000	0.000
					$\langle 3041 R^2, b^1, s_{\text{sym}}^0, s_{\text{asym}}^1, t^1 \rangle$	15.57%	0.000	0.000	0.000
					$\langle 3041 R^0, b^0, s_{\text{sym}}^1, s_{\text{asym}}^1, t^1 \rangle$	6.02%	0.000	-0.001	0.000
					$\langle 3041 R^0, b^0, s_{\text{sym}}^2, s_{\text{asym}}^0, t^0 \rangle$	5.28%	0.000	-0.001	0.000
					$\langle 3041 R^0, b^0, s_{\text{sym}}^0, s_{\text{asym}}^2, t^0 \rangle$	2.36%	-0.001	0.005	0.000

					$\langle 3041 R^0, b^0, s_{\text{sym}}^1, s_{\text{asym}}^2, t^0 \rangle$	1.01%	-0.001	0.002	0.000
					$\langle 3041 R^0, b^0, s_{\text{sym}}^1, s_{\text{asym}}^0, t^0 \rangle$	0.09%	0.002	-0.008	0.000
6544.0	0.105	-0.000	0.000	-0.003	$\langle 3043 R^0, b^2, s_{\text{sym}}^0, s_{\text{asym}}^1, t^1 \rangle$	23.48%	0.000	0.000	0.000
					$\langle 3043 R^2, b^1, s_{\text{sym}}^0, s_{\text{asym}}^1, t^1 \rangle$	14.21%	0.000	0.000	0.000
					$\langle 3043 R^0, b^0, s_{\text{sym}}^1, s_{\text{asym}}^1, t^1 \rangle$	7.44%	0.000	0.000	-0.002
					$\langle 3043 R^0, b^0, s_{\text{sym}}^1, s_{\text{asym}}^1, t^0 \rangle$	3.85%	0.000	0.000	0.012
					$\langle 3043 R^0, b^0, s_{\text{sym}}^0, s_{\text{asym}}^1, t^0 \rangle$	0.25%	0.000	0.000	-0.019
6563.5	0.064	-0.000	0.000	0.002	$\langle 3057 R^0, b^2, s_{\text{sym}}^0, s_{\text{asym}}^1, t^0 \rangle$	21.61%	0.000	0.000	-0.005
					$\langle 3057 R^3, b^0, s_{\text{sym}}^0, s_{\text{asym}}^1, t^0 \rangle$	17.99%	0.000	0.000	0.000
					$\langle 3057 R^5, b^1, s_{\text{sym}}^0, s_{\text{asym}}^0, t^0 \rangle$	6.09%	0.000	0.000	0.000
					$\langle 3057 R^0, b^0, s_{\text{sym}}^1, s_{\text{asym}}^1, t^0 \rangle$	1.27%	0.000	0.000	-0.007
					$\langle 3057 R^0, b^0, s_{\text{sym}}^0, s_{\text{asym}}^1, t^0 \rangle$	0.20%	0.000	0.000	0.017
6586.8	0.051	-0.000	0.000	-0.002	$\langle 3068 R^3, b^2, s_{\text{sym}}^0, s_{\text{asym}}^0, t^1 \rangle$	34.30%	0.000	0.000	0.000
					$\langle 3068 R^0, b^0, s_{\text{sym}}^2, s_{\text{asym}}^0, t^1 \rangle$	5.16%	0.000	0.000	-0.001
					$\langle 3068 R^0, b^0, s_{\text{sym}}^1, s_{\text{asym}}^1, t^0 \rangle$	1.86%	0.000	0.000	0.009
					$\langle 3068 R^0, b^0, s_{\text{sym}}^0, s_{\text{asym}}^1, t^0 \rangle$	0.10%	0.000	0.000	-0.012
					$\langle 3068 R^0, b^0, s_{\text{sym}}^0, s_{\text{asym}}^0, t^1 \rangle$	0.00%	0.000	0.000	0.001
6587.0	0.173	0.000	-0.000	0.003	$\langle 3069 R^0, b^0, s_{\text{sym}}^2, s_{\text{asym}}^0, t^1 \rangle$	16.95%	0.000	0.000	0.002
					$\langle 3069 R^0, b^0, s_{\text{sym}}^1, s_{\text{asym}}^1, t^0 \rangle$	6.16%	0.000	0.000	-0.016
					$\langle 3069 R^0, b^4, s_{\text{sym}}^0, s_{\text{asym}}^0, t^1 \rangle$	5.50%	0.000	0.000	0.000
					$\langle 3069 R^3, b^2, s_{\text{sym}}^0, s_{\text{asym}}^0, t^1 \rangle$	5.07%	0.000	0.000	0.000
					$\langle 3069 R^0, b^0, s_{\text{sym}}^0, s_{\text{asym}}^2, t^1 \rangle$	4.51%	0.000	0.000	0.002
					$\langle 3069 R^0, b^0, s_{\text{sym}}^0, s_{\text{asym}}^1, t^0 \rangle$	0.33%	0.000	0.000	0.022
6612.8	0.074	0.001	-0.002	0.000	$\langle 3107 R^0, b^0, s_{\text{sym}}^1, s_{\text{asym}}^1, t^1 \rangle$	25.93%	0.001	-0.002	0.000
					$\langle 3107 R^0, b^0, s_{\text{sym}}^2, s_{\text{asym}}^0, t^0 \rangle$	5.76%	0.000	-0.001	0.000
					$\langle 3107 R^0, b^4, s_{\text{sym}}^0, s_{\text{asym}}^0, t^0 \rangle$	5.47%	0.000	0.000	0.000
					$\langle 3107 R^3, b^0, s_{\text{sym}}^1, s_{\text{asym}}^0, t^0 \rangle$	0.62%	-0.002	-0.001	0.000
					$\langle 3107 R^1, b^0, s_{\text{sym}}^0, s_{\text{asym}}^0, t^0 \rangle$	0.00%	0.002	0.000	0.000
6620.2	0.063	0.000	-0.000	0.002	$\langle 3116 R^0, b^0, s_{\text{sym}}^1, s_{\text{asym}}^1, t^1 \rangle$	20.62%	0.000	0.000	0.003
					$\langle 3116 R^0, b^0, s_{\text{sym}}^1, s_{\text{asym}}^1, t^0 \rangle$	2.31%	0.000	0.000	-0.009
					$\langle 3116 R^0, b^0, s_{\text{sym}}^0, s_{\text{asym}}^1, t^0 \rangle$	0.12%	0.000	0.000	0.013
6732.7	0.053	0.000	0.002	-0.000	$\langle 3246 R^0, b^0, s_{\text{sym}}^2, s_{\text{asym}}^0, t^2 \rangle$	17.80%	0.000	0.000	0.000
					$\langle 3246 R^0, b^0, s_{\text{sym}}^0, s_{\text{asym}}^2, t^0 \rangle$	15.45%	-0.003	0.013	0.000
					$\langle 3246 R^0, b^0, s_{\text{sym}}^2, s_{\text{asym}}^0, t^0 \rangle$	10.48%	0.000	0.002	0.000
					$\langle 3246 R^0, b^4, s_{\text{sym}}^0, s_{\text{asym}}^0, t^2 \rangle$	6.22%	0.000	0.000	0.000
					$\langle 3246 R^0, b^2, s_{\text{sym}}^1, s_{\text{asym}}^0, t^0 \rangle$	5.06%	0.000	-0.001	0.000
					$\langle 3246 R^0, b^0, s_{\text{sym}}^1, s_{\text{asym}}^0, t^0 \rangle$	0.19%	0.002	-0.011	0.000
6735.1	0.090	-0.000	0.002	0.000	$\langle 3250 R^0, b^0, s_{\text{sym}}^2, s_{\text{asym}}^0, t^2 \rangle$	14.29%	0.000	0.000	0.000
					$\langle 3250 R^0, b^0, s_{\text{sym}}^2, s_{\text{asym}}^0, t^0 \rangle$	14.20%	0.000	0.002	0.000
					$\langle 3250 R^0, b^0, s_{\text{sym}}^0, s_{\text{asym}}^2, t^0 \rangle$	9.44%	-0.002	0.010	0.000
					$\langle 3250 R^0, b^4, s_{\text{sym}}^0, s_{\text{asym}}^0, t^2 \rangle$	7.74%	0.000	0.000	0.000
					$\langle 3250 R^0, b^2, s_{\text{sym}}^1, s_{\text{asym}}^0, t^0 \rangle$	5.31%	0.000	-0.001	0.000

$$\langle 3250 | R^0, b^0, s_{\text{sym}}^1, s_{\text{asym}}^0, t^0 \rangle \quad 0.11\% \quad 0.002 \quad -0.009 \quad 0.000$$

MeOH₂ ··· N₂

ω	I	μ_x	μ_y	μ_z	Assignment	$ c_n ^2$	$\mu_x^{g \rightarrow n}$	$\mu_y^{g \rightarrow n}$	$\mu_z^{g \rightarrow n}$
4047.7	0.231	-0.004	0.001	-0.003	$\langle 281 R^4, b^0, s_{\text{HB}}^0, s_{\text{free}}^0, t^1, s_X^0 \rangle$	17.37%	0.000	0.000	0.000
					$\langle 281 R^1, b^0, s_{\text{HB}}^1, s_{\text{free}}^0, t^1, s_X^0 \rangle$	13.25%	-0.004	-0.001	0.002
					$\langle 281 R^1, b^2, s_{\text{HB}}^0, s_{\text{free}}^0, t^0, s_X^0 \rangle$	9.05%	0.000	0.000	-0.002
					$\langle 281 R^4, b^0, s_{\text{HB}}^0, s_{\text{free}}^0, t^2, s_X^0 \rangle$	7.31%	0.000	0.000	0.000
					$\langle 281 R^1, b^0, s_{\text{HB}}^1, s_{\text{free}}^0, t^0, s_X^0 \rangle$	4.61%	-0.001	-0.005	0.007
					$\langle 281 R^1, b^0, s_{\text{HB}}^0, s_{\text{free}}^0, t^0, s_X^0 \rangle$	0.08%	-0.002	0.005	-0.007
					$\langle 281 R^0, b^0, s_{\text{HB}}^1, s_{\text{free}}^0, t^0, s_X^0 \rangle$	0.02%	0.006	0.001	0.000
4061.2	0.458	0.005	-0.004	0.003	$\langle 284 R^1, b^0, s_{\text{HB}}^1, s_{\text{free}}^0, t^0, s_X^0 \rangle$	26.22%	0.007	0.002	-0.003
					$\langle 284 R^4, b^0, s_{\text{HB}}^0, s_{\text{free}}^0, t^0, s_X^0 \rangle$	19.25%	0.000	0.001	-0.001
					$\langle 284 R^1, b^0, s_{\text{HB}}^0, s_{\text{free}}^0, t^0, s_X^0 \rangle$	0.06%	0.002	-0.004	0.007
					$\langle 284 R^0, b^0, s_{\text{HB}}^1, s_{\text{free}}^0, t^0, s_X^0 \rangle$	0.03%	-0.008	-0.001	0.000
4082.8	0.064	-0.001	0.002	-0.001	$\langle 287 R^2, b^1, s_{\text{HB}}^0, s_{\text{free}}^0, t^1, s_X^0 \rangle$	28.01%	0.000	0.000	0.000
					$\langle 287 R^4, b^0, s_{\text{HB}}^0, s_{\text{free}}^0, t^0, s_X^0 \rangle$	19.33%	0.000	0.001	-0.001
					$\langle 287 R^1, b^0, s_{\text{HB}}^1, s_{\text{free}}^0, t^0, s_X^0 \rangle$	5.43%	-0.005	-0.001	0.001
					$\langle 287 R^2, b^1, s_{\text{HB}}^0, s_{\text{free}}^0, t^0, s_X^0 \rangle$	5.13%	-0.001	0.001	0.001
					$\langle 287 R^1, b^0, s_{\text{HB}}^1, s_{\text{free}}^0, t^1, s_X^0 \rangle$	3.76%	0.002	0.001	-0.001
4087.1	0.130	0.002	-0.002	0.002	$\langle 288 R^2, b^1, s_{\text{HB}}^0, s_{\text{free}}^0, t^1, s_X^0 \rangle$	20.18%	0.000	0.000	0.000
					$\langle 288 R^4, b^0, s_{\text{HB}}^0, s_{\text{free}}^0, t^0, s_X^0 \rangle$	18.89%	0.000	0.000	0.000
					$\langle 288 R^1, b^0, s_{\text{HB}}^1, s_{\text{free}}^0, t^0, s_X^0 \rangle$	5.46%	0.005	0.003	-0.003
					$\langle 288 R^1, b^0, s_{\text{HB}}^0, s_{\text{free}}^0, t^0, s_X^0 \rangle$	0.02%	0.001	-0.003	0.004
4094.0	0.199	-0.003	0.002	-0.002	$\langle 292 R^2, b^1, s_{\text{HB}}^0, s_{\text{free}}^0, t^2, s_X^0 \rangle$	19.26%	0.000	0.000	0.000
					$\langle 292 R^4, b^0, s_{\text{HB}}^0, s_{\text{free}}^0, t^0, s_X^0 \rangle$	19.25%	0.000	0.000	0.000
					$\langle 292 R^1, b^0, s_{\text{HB}}^1, s_{\text{free}}^0, t^0, s_X^0 \rangle$	4.97%	-0.005	-0.001	0.001
					$\langle 292 R^0, b^0, s_{\text{HB}}^1, s_{\text{free}}^0, t^0, s_X^0 \rangle$	0.03%	0.007	0.001	0.000
					$\langle 292 R^1, b^0, s_{\text{HB}}^0, s_{\text{free}}^0, t^0, s_X^0 \rangle$	0.03%	-0.001	0.003	-0.005
4098.0	0.080	-0.002	0.002	-0.001	$\langle 294 R^2, b^1, s_{\text{HB}}^0, s_{\text{free}}^0, t^2, s_X^0 \rangle$	34.20%	0.000	0.000	0.000
					$\langle 294 R^1, b^0, s_{\text{HB}}^1, s_{\text{free}}^0, t^0, s_X^0 \rangle$	9.91%	-0.003	-0.001	0.001
					$\langle 294 R^1, b^0, s_{\text{HB}}^1, s_{\text{free}}^0, t^1, s_X^0 \rangle$	6.44%	0.003	0.001	-0.001
					$\langle 294 R^2, b^1, s_{\text{HB}}^0, s_{\text{free}}^0, t^1, s_X^0 \rangle$	5.21%	0.000	0.000	0.000

4217.8	0.081	-0.002	-0.001	-0.001	$\langle 321 R^1, b^2, s_{\text{HB}}^0, s_{\text{free}}^0, t^0, s_X^0 \rangle$	28.43%	0.000	0.001	0.000
					$\langle 321 R^1, b^2, s_{\text{HB}}^0, s_{\text{free}}^0, t^1, s_X^0 \rangle$	10.11%	0.000	0.000	0.000
					$\langle 321 R^1, b^0, s_{\text{HB}}^1, s_{\text{free}}^0, t^2, s_X^0 \rangle$	8.98%	0.000	0.000	0.000
					$\langle 321 R^3, b^1, s_{\text{HB}}^0, s_{\text{free}}^0, t^0, s_X^0 \rangle$	6.26%	0.000	0.000	-0.001
					$\langle 321 R^0, b^1, s_{\text{HB}}^1, s_{\text{free}}^0, t^0, s_X^0 \rangle$	1.87%	-0.003	0.000	0.001
					$\langle 321 R^2, b^0, s_{\text{HB}}^1, s_{\text{free}}^0, t^0, s_X^0 \rangle$	0.24%	-0.001	-0.001	0.001
					$\langle 321 R^0, b^0, s_{\text{HB}}^1, s_{\text{free}}^0, t^0, s_X^0 \rangle$	0.00%	0.002	0.000	0.000
4228.1	0.065	0.002	-0.001	0.001	$\langle 323 R^1, b^2, s_{\text{HB}}^0, s_{\text{free}}^0, t^1, s_X^0 \rangle$	22.03%	0.000	0.000	0.000
					$\langle 323 R^1, b^0, s_{\text{HB}}^1, s_{\text{free}}^0, t^1, s_X^0 \rangle$	12.92%	0.004	0.001	-0.001
					$\langle 323 R^1, b^0, s_{\text{HB}}^1, s_{\text{free}}^0, t^2, s_X^0 \rangle$	7.90%	0.000	0.000	0.000
					$\langle 323 R^0, b^0, s_{\text{HB}}^1, s_{\text{free}}^0, t^0, s_X^0 \rangle$	0.02%	-0.006	-0.001	0.000
					$\langle 323 R^1, b^0, s_{\text{HB}}^0, s_{\text{free}}^0, t^0, s_X^0 \rangle$	0.01%	0.001	-0.002	0.003
4233.0	0.058	-0.001	0.002	-0.001	$\langle 325 R^2, b^1, s_{\text{HB}}^0, s_{\text{free}}^0, t^0, s_X^0 \rangle$	47.17%	-0.002	0.002	0.002
					$\langle 325 R^1, b^0, s_{\text{HB}}^1, s_{\text{free}}^0, t^0, s_X^0 \rangle$	3.47%	-0.004	-0.001	0.001
					$\langle 325 R^0, b^0, s_{\text{HB}}^1, s_{\text{free}}^0, t^0, s_X^0 \rangle$	0.01%	0.004	0.000	0.000
4238.1	0.113	0.003	-0.001	0.001	$\langle 326 R^1, b^0, s_{\text{HB}}^1, s_{\text{free}}^0, t^1, s_X^0 \rangle$	18.31%	0.002	0.000	0.000
					$\langle 326 R^1, b^0, s_{\text{HB}}^1, s_{\text{free}}^0, t^2, s_X^0 \rangle$	13.49%	0.000	0.000	0.000
					$\langle 326 R^1, b^2, s_{\text{HB}}^0, s_{\text{free}}^0, t^1, s_X^0 \rangle$	7.32%	0.000	0.000	0.000
					$\langle 326 R^1, b^0, s_{\text{HB}}^1, s_{\text{free}}^0, t^0, s_X^0 \rangle$	4.12%	0.005	0.001	-0.001
					$\langle 326 R^0, b^0, s_{\text{HB}}^1, s_{\text{free}}^0, t^0, s_X^0 \rangle$	0.02%	-0.007	-0.001	0.000
					$\langle 326 R^1, b^0, s_{\text{HB}}^0, s_{\text{free}}^0, t^0, s_X^0 \rangle$	0.00%	0.000	-0.001	0.001
4348.9	0.070	0.001	-0.002	0.001	$\langle 351 R^4, b^0, s_{\text{HB}}^0, s_{\text{free}}^0, t^0, s_X^0 \rangle$	32.14%	0.000	0.000	0.000
					$\langle 351 R^1, b^0, s_{\text{HB}}^1, s_{\text{free}}^0, t^0, s_X^0 \rangle$	23.97%	0.009	0.001	-0.002
					$\langle 351 R^0, b^0, s_{\text{HB}}^1, s_{\text{free}}^0, t^0, s_X^0 \rangle$	0.03%	-0.008	-0.001	0.000
4362.2	2.076	0.002	-0.014	-0.000	$\langle 355 R^1, b^0, s_{\text{HB}}^0, s_{\text{free}}^1, t^0, s_X^0 \rangle$	77.47%	-0.007	0.004	-0.022
					$\langle 355 R^1, b^0, s_{\text{HB}}^0, s_{\text{free}}^0, t^0, s_X^0 \rangle$	0.81%	0.006	-0.015	0.024
					$\langle 355 R^0, b^0, s_{\text{HB}}^1, s_{\text{free}}^0, t^0, s_X^0 \rangle$	0.01%	-0.004	0.000	0.000
4376.9	0.114	0.002	-0.002	0.001	$\langle 358 R^3, b^1, s_{\text{HB}}^0, s_{\text{free}}^0, t^0, s_X^0 \rangle$	31.89%	0.000	0.000	-0.001
					$\langle 358 R^1, b^2, s_{\text{HB}}^0, s_{\text{free}}^0, t^0, s_X^0 \rangle$	12.51%	0.000	0.000	0.000
					$\langle 358 R^2, b^0, s_{\text{HB}}^1, s_{\text{free}}^0, t^0, s_X^0 \rangle$	1.52%	-0.002	-0.001	0.002
					$\langle 358 R^1, b^0, s_{\text{HB}}^0, s_{\text{free}}^0, t^0, s_X^0 \rangle$	0.04%	0.001	-0.003	0.005
					$\langle 358 R^0, b^0, s_{\text{HB}}^1, s_{\text{free}}^0, t^0, s_X^0 \rangle$	0.01%	0.004	0.000	0.000
4403.6	0.129	0.001	-0.003	0.001	$\langle 368 R^2, b^1, s_{\text{HB}}^0, s_{\text{free}}^0, t^1, s_X^0 \rangle$	32.09%	0.000	0.000	0.000
					$\langle 368 R^1, b^0, s_{\text{HB}}^1, s_{\text{free}}^0, t^0, s_X^0 \rangle$	30.07%	0.010	0.001	-0.002
					$\langle 368 R^0, b^0, s_{\text{HB}}^1, s_{\text{free}}^0, t^0, s_X^0 \rangle$	0.04%	-0.008	-0.001	0.000
4528.4	0.090	-0.002	-0.001	-0.001	$\langle 402 R^1, b^2, s_{\text{HB}}^0, s_{\text{free}}^0, t^0, s_X^0 \rangle$	19.74%	0.000	0.000	0.000
					$\langle 402 R^3, b^1, s_{\text{HB}}^0, s_{\text{free}}^0, t^0, s_X^0 \rangle$	6.41%	0.000	0.000	0.000
					$\langle 402 R^2, b^1, s_{\text{HB}}^0, s_{\text{free}}^0, t^2, s_X^0 \rangle$	5.40%	0.000	0.000	0.000
					$\langle 402 R^0, b^1, s_{\text{HB}}^1, s_{\text{free}}^0, t^0, s_X^0 \rangle$	4.71%	-0.005	0.000	0.001
					$\langle 402 R^2, b^0, s_{\text{HB}}^1, s_{\text{free}}^0, t^0, s_X^0 \rangle$	4.00%	-0.004	-0.002	0.003
$\langle 402 R^0, b^0, s_{\text{HB}}^1, s_{\text{free}}^0, t^0, s_X^0 \rangle$	0.11%	0.015	0.001	-0.001					

4555.6	1.086	0.008	-0.004	0.003	$\langle 408 R^1, b^0, s_{\text{HB}}^0, s_{\text{free}}^1, t^0, s_X^0 \rangle$	83.40%	0.001	0.000	0.000
					$\langle 408 R^1, b^0, s_{\text{HB}}^0, s_{\text{free}}^0, t^0, s_X^0 \rangle$	0.43%	0.003	0.000	0.001
					$\langle 408 R^0, b^0, s_{\text{HB}}^1, s_{\text{free}}^0, t^0, s_X^0 \rangle$	0.00%	0.003	0.000	0.000
4636.2	0.687	0.003	0.006	0.003	$\langle 430 R^0, b^1, s_{\text{HB}}^1, s_{\text{free}}^0, t^0, s_X^0 \rangle$	36.63%	0.013	0.001	-0.003
					$\langle 430 R^3, b^1, s_{\text{HB}}^0, s_{\text{free}}^0, t^0, s_X^0 \rangle$	15.14%	0.000	0.000	-0.001
					$\langle 430 R^0, b^1, s_{\text{HB}}^1, s_{\text{free}}^0, t^1, s_X^0 \rangle$	6.05%	0.000	0.000	0.000
					$\langle 430 R^0, b^1, s_{\text{HB}}^0, s_{\text{free}}^0, t^0, s_X^0 \rangle$	0.19%	-0.004	0.004	0.003
					$\langle 430 R^0, b^0, s_{\text{HB}}^1, s_{\text{free}}^0, t^0, s_X^0 \rangle$	0.07%	-0.012	-0.001	0.001
4682.5	0.083	-0.000	-0.003	-0.001	$\langle 447 R^1, b^2, s_{\text{HB}}^0, s_{\text{free}}^0, t^0, s_X^0 \rangle$	5.21%	0.000	0.000	0.000
					$\langle 447 R^0, b^1, s_{\text{HB}}^1, s_{\text{free}}^0, t^0, s_X^0 \rangle$	4.40%	-0.005	0.000	0.001
					$\langle 447 R^0, b^1, s_{\text{HB}}^0, s_{\text{free}}^0, t^0, s_X^0 \rangle$	0.05%	0.002	-0.002	-0.002
					$\langle 447 R^0, b^0, s_{\text{HB}}^1, s_{\text{free}}^0, t^0, s_X^0 \rangle$	0.01%	0.005	0.000	0.000
4704.0	0.118	0.002	0.002	0.001	$\langle 457 R^1, b^2, s_{\text{HB}}^0, s_{\text{free}}^0, t^1, s_X^0 \rangle$	40.60%	0.000	0.000	0.000
					$\langle 457 R^0, b^1, s_{\text{HB}}^1, s_{\text{free}}^0, t^0, s_X^0 \rangle$	6.53%	0.006	0.000	-0.001
					$\langle 457 R^3, b^1, s_{\text{HB}}^0, s_{\text{free}}^0, t^1, s_X^0 \rangle$	5.41%	0.000	0.000	0.000
					$\langle 457 R^0, b^1, s_{\text{HB}}^0, s_{\text{free}}^0, t^0, s_X^0 \rangle$	0.07%	-0.002	0.003	0.002
					$\langle 457 R^0, b^0, s_{\text{HB}}^1, s_{\text{free}}^0, t^0, s_X^0 \rangle$	0.01%	-0.005	0.000	0.000
4760.4	0.161	-0.001	-0.003	-0.001	$\langle 467 R^1, b^0, s_{\text{HB}}^0, s_{\text{free}}^1, t^0, s_X^0 \rangle$	90.41%	-0.001	-0.001	-0.004
					$\langle 467 R^1, b^0, s_{\text{HB}}^0, s_{\text{free}}^0, t^0, s_X^0 \rangle$	0.01%	0.001	-0.002	0.003
4777.1	0.103	-0.001	-0.003	-0.001	$\langle 474 R^2, b^0, s_{\text{HB}}^1, s_{\text{free}}^0, t^0, s_X^0 \rangle$	18.04%	0.008	0.004	-0.007
					$\langle 474 R^5, b^0, s_{\text{HB}}^0, s_{\text{free}}^0, t^0, s_X^0 \rangle$	11.29%	0.000	0.000	0.000
					$\langle 474 R^1, b^2, s_{\text{HB}}^0, s_{\text{free}}^0, t^3, s_X^0 \rangle$	5.86%	0.000	0.000	0.000
					$\langle 474 R^0, b^1, s_{\text{HB}}^1, s_{\text{free}}^0, t^0, s_X^0 \rangle$	2.88%	-0.004	0.000	0.001
					$\langle 474 R^0, b^0, s_{\text{HB}}^1, s_{\text{free}}^0, t^0, s_X^0 \rangle$	0.19%	-0.019	-0.002	0.001
4841.6	0.069	-0.001	-0.002	-0.001	$\langle 497 R^2, b^0, s_{\text{HB}}^1, s_{\text{free}}^0, t^0, s_X^0 \rangle$	9.56%	0.006	0.003	-0.005
					$\langle 497 R^5, b^0, s_{\text{HB}}^0, s_{\text{free}}^0, t^1, s_X^0 \rangle$	9.45%	0.000	0.000	0.000
					$\langle 497 R^3, b^0, s_{\text{HB}}^0, s_{\text{free}}^0, t^0, s_X^0 \rangle$	0.73%	0.001	-0.002	0.003
					$\langle 497 R^0, b^0, s_{\text{HB}}^1, s_{\text{free}}^0, t^0, s_X^0 \rangle$	0.14%	-0.017	-0.001	0.001
4847.5	0.071	-0.001	-0.002	-0.001	$\langle 499 R^0, b^3, s_{\text{HB}}^0, s_{\text{free}}^0, t^0, s_X^0 \rangle$	18.10%	0.001	-0.002	-0.001
					$\langle 499 R^2, b^2, s_{\text{HB}}^0, s_{\text{free}}^0, t^0, s_X^0 \rangle$	9.72%	0.001	-0.001	-0.001
					$\langle 499 R^1, b^0, s_{\text{HB}}^1, s_{\text{free}}^0, t^3, s_X^0 \rangle$	9.04%	0.000	0.000	0.000
					$\langle 499 R^1, b^2, s_{\text{HB}}^0, s_{\text{free}}^0, t^2, s_X^0 \rangle$	6.45%	0.000	0.000	0.000
					$\langle 499 R^2, b^0, s_{\text{HB}}^1, s_{\text{free}}^0, t^0, s_X^0 \rangle$	1.20%	-0.002	-0.001	0.002
					$\langle 499 R^0, b^1, s_{\text{HB}}^1, s_{\text{free}}^0, t^0, s_X^0 \rangle$	1.12%	-0.002	0.000	0.001
					$\langle 499 R^0, b^0, s_{\text{HB}}^1, s_{\text{free}}^0, t^0, s_X^0 \rangle$	0.02%	0.006	0.000	0.000
4851.7	0.247	0.002	0.004	0.002	$\langle 501 R^0, b^3, s_{\text{HB}}^0, s_{\text{free}}^0, t^0, s_X^0 \rangle$	18.65%	-0.001	0.002	0.001
					$\langle 501 R^2, b^2, s_{\text{HB}}^0, s_{\text{free}}^0, t^0, s_X^0 \rangle$	13.81%	-0.001	0.001	0.001
					$\langle 501 R^1, b^0, s_{\text{HB}}^1, s_{\text{free}}^0, t^3, s_X^0 \rangle$	8.09%	0.000	0.000	0.000
					$\langle 501 R^0, b^1, s_{\text{HB}}^1, s_{\text{free}}^0, t^0, s_X^0 \rangle$	5.34%	0.005	0.000	-0.001
4871.8	1.056	-0.006	0.007	-0.000	$\langle 507 R^1, b^0, s_{\text{HB}}^0, s_{\text{free}}^1, t^0, s_X^0 \rangle$	84.55%	-0.004	0.003	0.000
					$\langle 507 R^1, b^0, s_{\text{HB}}^0, s_{\text{free}}^0, t^0, s_X^0 \rangle$	0.06%	-0.002	0.004	-0.006

					$\langle 507 R^0, b^1, s_{\text{HB}}^0, s_{\text{free}}^0, t^0, s_X^0 \rangle$	0.03%	-0.001	0.002	0.001
4999.9	0.159	0.002	0.003	0.001	$\langle 556 R^0, b^3, s_{\text{HB}}^0, s_{\text{free}}^0, t^0, s_X^0 \rangle$	25.75%	-0.002	0.002	0.001
					$\langle 556 R^2, b^2, s_{\text{HB}}^0, s_{\text{free}}^0, t^0, s_X^0 \rangle$	19.98%	0.001	-0.001	-0.001
					$\langle 556 R^0, b^3, s_{\text{HB}}^0, s_{\text{free}}^0, t^1, s_X^0 \rangle$	5.31%	0.000	0.000	0.000
					$\langle 556 R^2, b^0, s_{\text{HB}}^1, s_{\text{free}}^0, t^0, s_X^0 \rangle$	0.95%	-0.002	-0.001	0.002
					$\langle 556 R^0, b^0, s_{\text{HB}}^1, s_{\text{free}}^0, t^0, s_X^0 \rangle$	0.02%	0.006	0.001	0.000
5139.0	1.155	0.008	0.004	0.002	$\langle 608 R^0, b^1, s_{\text{HB}}^0, s_{\text{free}}^1, t^0, s_X^0 \rangle$	45.95%	0.003	0.008	0.005
					$\langle 608 R^2, b^0, s_{\text{HB}}^0, s_{\text{free}}^1, t^0, s_X^0 \rangle$	28.04%	0.002	0.002	0.007
					$\langle 608 R^0, b^0, s_{\text{HB}}^0, s_{\text{free}}^1, t^0, s_X^0 \rangle$	0.32%	-0.005	-0.008	-0.005
5235.9	0.104	0.003	0.001	0.001	$\langle 643 R^5, b^0, s_{\text{HB}}^0, s_{\text{free}}^0, t^0, s_X^0 \rangle$	33.31%	0.000	0.000	0.000
					$\langle 643 R^3, b^1, s_{\text{HB}}^0, s_{\text{free}}^0, t^1, s_X^0 \rangle$	9.81%	0.000	0.000	0.000
					$\langle 643 R^0, b^1, s_{\text{HB}}^0, s_{\text{free}}^1, t^0, s_X^0 \rangle$	2.19%	0.001	0.002	0.001
					$\langle 643 R^2, b^0, s_{\text{HB}}^0, s_{\text{free}}^1, t^0, s_X^0 \rangle$	2.12%	-0.001	-0.001	-0.002
					$\langle 643 R^0, b^0, s_{\text{HB}}^0, s_{\text{free}}^1, t^0, s_X^0 \rangle$	0.04%	0.002	0.003	0.002
5239.0	1.190	-0.009	-0.003	-0.002	$\langle 644 R^0, b^1, s_{\text{HB}}^0, s_{\text{free}}^1, t^0, s_X^0 \rangle$	28.99%	-0.002	-0.007	-0.004
					$\langle 644 R^2, b^0, s_{\text{HB}}^0, s_{\text{free}}^1, t^0, s_X^0 \rangle$	27.20%	0.002	0.002	0.007
					$\langle 644 R^4, b^0, s_{\text{HB}}^0, s_{\text{free}}^0, t^1, s_X^0 \rangle$	14.38%	0.000	0.000	0.000
					$\langle 644 R^0, b^0, s_{\text{HB}}^0, s_{\text{free}}^1, t^0, s_X^0 \rangle$	0.41%	-0.005	-0.009	-0.006
5239.3	0.241	-0.004	-0.001	-0.001	$\langle 645 R^4, b^0, s_{\text{HB}}^0, s_{\text{free}}^0, t^1, s_X^0 \rangle$	66.20%	0.000	0.000	0.000
					$\langle 645 R^0, b^1, s_{\text{HB}}^0, s_{\text{free}}^1, t^0, s_X^0 \rangle$	5.94%	-0.001	-0.003	-0.002
					$\langle 645 R^2, b^0, s_{\text{HB}}^0, s_{\text{free}}^1, t^0, s_X^0 \rangle$	5.58%	0.001	0.001	0.003
					$\langle 645 R^0, b^0, s_{\text{HB}}^0, s_{\text{free}}^1, t^0, s_X^0 \rangle$	0.08%	-0.002	-0.004	-0.003
5384.3	0.244	0.004	0.001	-0.000	$\langle 709 R^3, b^0, s_{\text{HB}}^0, s_{\text{free}}^0, t^0, s_X^1 \rangle$	36.89%	0.000	0.000	0.000
					$\langle 709 R^0, b^0, s_{\text{HB}}^1, s_{\text{free}}^0, t^0, s_X^1 \rangle$	27.40%	0.003	0.000	0.000
					$\langle 709 R^1, b^1, s_{\text{HB}}^0, s_{\text{free}}^0, t^0, s_X^1 \rangle$	5.25%	0.000	0.000	0.000
					$\langle 709 R^0, b^0, s_{\text{HB}}^0, s_{\text{free}}^0, t^0, s_X^1 \rangle$	0.05%	0.002	0.000	0.000
					$\langle 709 R^0, b^0, s_{\text{HB}}^2, s_{\text{free}}^0, t^0, s_X^0 \rangle$	0.02%	-0.001	0.000	0.000
5413.3	0.230	-0.004	-0.001	0.000	$\langle 719 R^0, b^0, s_{\text{HB}}^1, s_{\text{free}}^0, t^0, s_X^1 \rangle$	24.89%	-0.003	0.000	0.000
					$\langle 719 R^3, b^0, s_{\text{HB}}^0, s_{\text{free}}^0, t^0, s_X^1 \rangle$	15.95%	0.000	0.000	0.000
					$\langle 719 R^1, b^1, s_{\text{HB}}^0, s_{\text{free}}^0, t^0, s_X^1 \rangle$	15.30%	0.000	0.000	0.000
					$\langle 719 R^1, b^1, s_{\text{HB}}^0, s_{\text{free}}^0, t^1, s_X^1 \rangle$	11.66%	0.000	0.000	0.000
					$\langle 719 R^0, b^0, s_{\text{HB}}^1, s_{\text{free}}^0, t^1, s_X^1 \rangle$	7.83%	-0.001	0.000	0.000
					$\langle 719 R^0, b^0, s_{\text{HB}}^0, s_{\text{free}}^0, t^0, s_X^1 \rangle$	0.07%	-0.002	0.000	0.000
					$\langle 719 R^0, b^0, s_{\text{HB}}^1, s_{\text{free}}^0, t^0, s_X^0 \rangle$	0.00%	0.001	0.000	0.000
5434.7	0.142	-0.003	-0.000	0.000	$\langle 725 R^1, b^1, s_{\text{HB}}^0, s_{\text{free}}^0, t^1, s_X^1 \rangle$	48.99%	0.000	0.000	0.000
					$\langle 725 R^0, b^0, s_{\text{HB}}^1, s_{\text{free}}^0, t^0, s_X^1 \rangle$	18.55%	-0.002	0.000	0.000
					$\langle 725 R^3, b^0, s_{\text{HB}}^0, s_{\text{free}}^0, t^2, s_X^1 \rangle$	5.40%	0.000	0.000	0.000
					$\langle 725 R^0, b^0, s_{\text{HB}}^0, s_{\text{free}}^0, t^0, s_X^1 \rangle$	0.08%	-0.002	0.000	0.000
					$\langle 725 R^0, b^0, s_{\text{HB}}^2, s_{\text{free}}^0, t^0, s_X^0 \rangle$	0.01%	0.000	0.000	0.000
5657.5	0.067	0.002	0.000	0.000	$\langle 832 R^5, b^0, s_{\text{HB}}^0, s_{\text{free}}^0, t^2, s_X^0 \rangle$	15.00%	0.000	0.000	0.000
					$\langle 832 R^1, b^1, s_{\text{HB}}^1, s_{\text{free}}^0, t^0, s_X^0 \rangle$	5.56%	0.000	0.000	0.000
					$\langle 832 R^3, b^0, s_{\text{HB}}^1, s_{\text{free}}^0, t^0, s_X^0 \rangle$	3.83%	0.000	-0.002	0.004

					$\langle 832 R^0, b^0, s_{\text{HB}}^2, s_{\text{free}}^0, t^0, s_X^0 \rangle$	2.44%	0.008	0.000	-0.001
					$\langle 832 R^0, b^0, s_{\text{HB}}^1, s_{\text{free}}^0, t^0, s_X^0 \rangle$	0.00%	-0.002	0.000	0.000
5828.4	0.131	0.003	0.000	0.000	$\langle 918 R^2, b^0, s_{\text{HB}}^1, s_{\text{free}}^0, t^3, s_X^0 \rangle$	15.98%	0.000	0.000	0.000
					$\langle 918 R^3, b^1, s_{\text{HB}}^0, s_{\text{free}}^0, t^3, s_X^0 \rangle$	6.71%	0.000	0.000	0.000
					$\langle 918 R^0, b^0, s_{\text{HB}}^2, s_{\text{free}}^0, t^1, s_X^0 \rangle$	3.29%	-0.003	0.000	0.000
					$\langle 918 R^0, b^0, s_{\text{HB}}^2, s_{\text{free}}^0, t^0, s_X^0 \rangle$	1.21%	0.005	0.000	-0.001
					$\langle 918 R^0, b^0, s_{\text{HB}}^0, s_{\text{free}}^0, t^1, s_X^0 \rangle$	0.00%	0.001	0.000	0.000
5830.1	0.268	0.004	0.000	0.000	$\langle 920 R^2, b^2, s_{\text{HB}}^0, s_{\text{free}}^0, t^1, s_X^0 \rangle$	7.50%	0.000	0.000	0.000
					$\langle 920 R^0, b^0, s_{\text{HB}}^2, s_{\text{free}}^0, t^1, s_X^0 \rangle$	6.99%	-0.004	-0.001	0.000
					$\langle 920 R^1, b^1, s_{\text{HB}}^1, s_{\text{free}}^0, t^1, s_X^0 \rangle$	6.36%	-0.001	0.000	0.000
					$\langle 920 R^2, b^0, s_{\text{HB}}^1, s_{\text{free}}^0, t^3, s_X^0 \rangle$	5.16%	0.000	0.000	0.000
					$\langle 920 R^0, b^0, s_{\text{HB}}^2, s_{\text{free}}^0, t^0, s_X^0 \rangle$	2.47%	0.008	0.000	-0.001
					$\langle 920 R^0, b^0, s_{\text{HB}}^0, s_{\text{free}}^0, t^1, s_X^0 \rangle$	0.01%	0.002	0.000	0.000
5841.4	0.125	0.003	0.000	0.000	$\langle 923 R^2, b^0, s_{\text{HB}}^0, s_{\text{free}}^1, t^1, s_X^0 \rangle$	56.95%	0.001	0.000	0.000
					$\langle 923 R^0, b^0, s_{\text{HB}}^2, s_{\text{free}}^0, t^0, s_X^0 \rangle$	2.27%	0.007	0.000	-0.001
					$\langle 923 R^0, b^0, s_{\text{HB}}^1, s_{\text{free}}^0, t^0, s_X^0 \rangle$	0.01%	-0.004	0.000	0.000
					$\langle 923 R^0, b^0, s_{\text{HB}}^0, s_{\text{free}}^0, t^1, s_X^0 \rangle$	0.01%	-0.003	0.000	0.000
5844.6	0.166	0.003	0.000	0.000	$\langle 925 R^2, b^2, s_{\text{HB}}^0, s_{\text{free}}^0, t^0, s_X^0 \rangle$	9.24%	0.000	0.000	0.000
					$\langle 925 R^2, b^0, s_{\text{HB}}^0, s_{\text{free}}^1, t^1, s_X^0 \rangle$	7.24%	0.000	0.000	0.000
					$\langle 925 R^5, b^0, s_{\text{HB}}^0, s_{\text{free}}^0, t^2, s_X^0 \rangle$	6.83%	0.000	0.000	0.000
					$\langle 925 R^1, b^1, s_{\text{HB}}^1, s_{\text{free}}^0, t^0, s_X^0 \rangle$	6.06%	0.000	0.000	0.000
					$\langle 925 R^0, b^0, s_{\text{HB}}^2, s_{\text{free}}^0, t^0, s_X^0 \rangle$	3.25%	0.009	0.000	-0.001
					$\langle 925 R^0, b^0, s_{\text{HB}}^1, s_{\text{free}}^1, t^0, s_X^0 \rangle$	0.11%	-0.001	0.000	0.000
					$\langle 925 R^0, b^0, s_{\text{HB}}^1, s_{\text{free}}^0, t^0, s_X^0 \rangle$	0.01%	-0.005	0.000	0.000
5847.3	0.058	-0.002	-0.000	-0.000	$\langle 926 R^5, b^0, s_{\text{HB}}^0, s_{\text{free}}^0, t^0, s_X^0 \rangle$	45.59%	0.000	0.000	0.000
					$\langle 926 R^4, b^0, s_{\text{HB}}^0, s_{\text{free}}^0, t^3, s_X^0 \rangle$	12.18%	0.000	0.000	0.000
					$\langle 926 R^0, b^0, s_{\text{HB}}^2, s_{\text{free}}^0, t^0, s_X^0 \rangle$	1.08%	-0.005	0.000	0.001
					$\langle 926 R^2, b^0, s_{\text{HB}}^1, s_{\text{free}}^0, t^0, s_X^0 \rangle$	0.16%	-0.001	0.000	0.000
					$\langle 926 R^0, b^0, s_{\text{HB}}^1, s_{\text{free}}^0, t^0, s_X^0 \rangle$	0.00%	0.003	0.000	0.000
5847.4	0.129	0.003	0.000	0.000	$\langle 927 R^4, b^0, s_{\text{HB}}^0, s_{\text{free}}^0, t^3, s_X^0 \rangle$	28.44%	0.000	0.000	0.000
					$\langle 927 R^5, b^0, s_{\text{HB}}^0, s_{\text{free}}^0, t^0, s_X^0 \rangle$	17.30%	0.000	0.000	0.000
					$\langle 927 R^0, b^0, s_{\text{HB}}^2, s_{\text{free}}^0, t^0, s_X^0 \rangle$	2.34%	0.007	0.000	-0.001
					$\langle 927 R^2, b^0, s_{\text{HB}}^1, s_{\text{free}}^0, t^0, s_X^0 \rangle$	0.37%	0.002	0.000	0.000
					$\langle 927 R^0, b^0, s_{\text{HB}}^1, s_{\text{free}}^0, t^0, s_X^0 \rangle$	0.02%	-0.006	0.000	0.000
5865.1	0.054	0.002	0.000	0.000	$\langle 932 R^5, b^0, s_{\text{HB}}^0, s_{\text{free}}^0, t^0, s_X^0 \rangle$	18.85%	0.000	0.000	0.000
					$\langle 932 R^2, b^2, s_{\text{HB}}^0, s_{\text{free}}^0, t^1, s_X^0 \rangle$	7.40%	0.000	0.000	0.000
					$\langle 932 R^2, b^0, s_{\text{HB}}^1, s_{\text{free}}^0, t^0, s_X^0 \rangle$	0.88%	0.003	0.000	0.000
					$\langle 932 R^0, b^0, s_{\text{HB}}^2, s_{\text{free}}^0, t^0, s_X^0 \rangle$	0.63%	0.004	0.000	-0.001
					$\langle 932 R^0, b^0, s_{\text{HB}}^1, s_{\text{free}}^0, t^0, s_X^0 \rangle$	0.00%	-0.003	0.000	0.000
5879.7	0.096	-0.002	0.001	0.000	$\langle 939 R^2, b^0, s_{\text{HB}}^0, s_{\text{free}}^1, t^0, s_X^0 \rangle$	35.58%	0.000	0.000	0.000
					$\langle 939 R^5, b^0, s_{\text{HB}}^0, s_{\text{free}}^0, t^1, s_X^0 \rangle$	6.49%	0.000	0.000	0.000
					$\langle 939 R^0, b^0, s_{\text{HB}}^2, s_{\text{free}}^0, t^0, s_X^0 \rangle$	2.05%	-0.007	0.000	0.001

					$\langle 939 R^0, b^0, s_{\text{HB}}^1, s_{\text{free}}^0, t^0, s_X^0 \rangle$	0.01%	0.005	0.000	0.000
5894.4	0.092	-0.002	-0.000	-0.000	$\langle 949 R^2, b^0, s_{\text{HB}}^1, s_{\text{free}}^0, t^4, s_X^0 \rangle$	54.77%	0.000	0.000	0.000
					$\langle 949 R^2, b^0, s_{\text{HB}}^1, s_{\text{free}}^0, t^3, s_X^0 \rangle$	9.31%	0.000	0.000	0.000
					$\langle 949 R^0, b^0, s_{\text{HB}}^2, s_{\text{free}}^0, t^0, s_X^0 \rangle$	1.24%	-0.005	0.000	0.001
					$\langle 949 R^0, b^0, s_{\text{HB}}^2, s_{\text{free}}^0, t^1, s_X^0 \rangle$	0.47%	0.001	0.000	0.000
					$\langle 949 R^0, b^0, s_{\text{HB}}^1, s_{\text{free}}^0, t^0, s_X^0 \rangle$	0.00%	0.001	0.000	0.000
5895.5	1.142	0.009	0.000	0.001	$\langle 950 R^2, b^2, s_{\text{HB}}^0, s_{\text{free}}^0, t^0, s_X^0 \rangle$	17.97%	0.000	0.000	0.000
					$\langle 950 R^0, b^0, s_{\text{HB}}^2, s_{\text{free}}^0, t^0, s_X^0 \rangle$	15.91%	0.019	0.001	-0.003
					$\langle 950 R^0, b^0, s_{\text{HB}}^2, s_{\text{free}}^0, t^1, s_X^0 \rangle$	5.71%	-0.003	0.000	0.000
					$\langle 950 R^0, b^0, s_{\text{HB}}^1, s_{\text{free}}^0, t^0, s_X^0 \rangle$	0.02%	-0.006	0.000	0.000
5913.4	0.148	0.003	0.000	0.000	$\langle 962 R^1, b^3, s_{\text{HB}}^0, s_{\text{free}}^0, t^1, s_X^0 \rangle$	21.43%	0.000	0.000	0.000
					$\langle 962 R^3, b^0, s_{\text{HB}}^1, s_{\text{free}}^0, t^1, s_X^0 \rangle$	13.90%	0.000	0.000	0.000
					$\langle 962 R^4, b^1, s_{\text{HB}}^0, s_{\text{free}}^0, t^1, s_X^0 \rangle$	7.91%	0.000	0.000	0.000
					$\langle 962 R^0, b^0, s_{\text{HB}}^2, s_{\text{free}}^0, t^0, s_X^0 \rangle$	2.67%	0.008	0.000	-0.001
					$\langle 962 R^3, b^0, s_{\text{HB}}^1, s_{\text{free}}^0, t^0, s_X^0 \rangle$	0.16%	0.000	0.000	0.001
					$\langle 962 R^0, b^0, s_{\text{HB}}^1, s_{\text{free}}^0, t^0, s_X^0 \rangle$	0.01%	-0.005	0.000	0.000
5923.5	0.054	-0.002	-0.000	-0.000	$\langle 968 R^1, b^3, s_{\text{HB}}^0, s_{\text{free}}^0, t^1, s_X^0 \rangle$	24.04%	0.000	0.000	0.000
					$\langle 968 R^4, b^1, s_{\text{HB}}^0, s_{\text{free}}^0, t^1, s_X^0 \rangle$	7.94%	0.000	0.000	0.000
					$\langle 968 R^0, b^0, s_{\text{HB}}^2, s_{\text{free}}^0, t^0, s_X^0 \rangle$	1.03%	-0.005	0.000	0.001
					$\langle 968 R^3, b^0, s_{\text{HB}}^1, s_{\text{free}}^0, t^0, s_X^0 \rangle$	0.05%	0.000	0.000	0.000
					$\langle 968 R^0, b^0, s_{\text{HB}}^1, s_{\text{free}}^0, t^0, s_X^0 \rangle$	0.00%	0.003	0.000	0.000
6001.3	0.149	0.003	-0.000	0.000	$\langle 1006 R^1, b^1, s_{\text{HB}}^1, s_{\text{free}}^0, t^0, s_X^0 \rangle$	13.66%	0.000	0.000	0.000
					$\langle 1006 R^5, b^0, s_{\text{HB}}^0, s_{\text{free}}^0, t^1, s_X^0 \rangle$	6.37%	0.000	0.000	0.000
					$\langle 1006 R^0, b^0, s_{\text{HB}}^2, s_{\text{free}}^0, t^0, s_X^0 \rangle$	1.52%	0.006	0.000	-0.001
					$\langle 1006 R^0, b^0, s_{\text{HB}}^2, s_{\text{free}}^0, t^1, s_X^0 \rangle$	0.82%	-0.001	0.000	0.000
					$\langle 1006 R^0, b^0, s_{\text{HB}}^1, s_{\text{free}}^0, t^0, s_X^0 \rangle$	0.00%	-0.003	0.000	0.000
6018.6	0.199	0.004	-0.000	0.000	$\langle 1019 R^2, b^2, s_{\text{HB}}^0, s_{\text{free}}^0, t^2, s_X^0 \rangle$	6.13%	0.000	0.000	0.000
					$\langle 1019 R^0, b^0, s_{\text{HB}}^2, s_{\text{free}}^0, t^0, s_X^0 \rangle$	5.22%	0.011	0.000	-0.001
					$\langle 1019 R^1, b^1, s_{\text{HB}}^1, s_{\text{free}}^0, t^1, s_X^0 \rangle$	5.05%	0.000	0.000	0.000
					$\langle 1019 R^0, b^0, s_{\text{HB}}^2, s_{\text{free}}^0, t^1, s_X^0 \rangle$	0.87%	0.001	0.000	0.000
					$\langle 1019 R^0, b^0, s_{\text{HB}}^1, s_{\text{free}}^0, t^0, s_X^0 \rangle$	0.04%	-0.009	-0.001	0.000
6019.6	0.159	-0.003	-0.000	-0.000	$\langle 1020 R^3, b^2, s_{\text{HB}}^0, s_{\text{free}}^0, t^0, s_X^0 \rangle$	13.41%	0.000	0.000	0.000
					$\langle 1020 R^0, b^0, s_{\text{HB}}^2, s_{\text{free}}^0, t^0, s_X^0 \rangle$	3.18%	-0.009	0.000	0.001
					$\langle 1020 R^1, b^0, s_{\text{HB}}^1, s_{\text{free}}^0, t^0, s_X^0 \rangle$	0.16%	0.000	0.001	-0.001
					$\langle 1020 R^0, b^0, s_{\text{HB}}^1, s_{\text{free}}^0, t^0, s_X^0 \rangle$	0.02%	0.006	0.001	0.000
6078.5	0.325	-0.005	0.000	-0.000	$\langle 1059 R^2, b^2, s_{\text{HB}}^0, s_{\text{free}}^0, t^1, s_X^0 \rangle$	18.59%	0.000	0.000	0.000
					$\langle 1059 R^0, b^0, s_{\text{HB}}^2, s_{\text{free}}^0, t^0, s_X^0 \rangle$	8.31%	-0.014	0.000	0.002
					$\langle 1059 R^0, b^0, s_{\text{HB}}^2, s_{\text{free}}^0, t^1, s_X^0 \rangle$	5.25%	-0.003	0.000	0.000
					$\langle 1059 R^0, b^0, s_{\text{HB}}^1, s_{\text{free}}^0, t^0, s_X^0 \rangle$	0.07%	0.012	0.001	-0.001
6079.2	0.061	-0.002	0.000	-0.000	$\langle 1060 R^4, b^1, s_{\text{HB}}^0, s_{\text{free}}^0, t^0, s_X^0 \rangle$	35.79%	0.000	0.000	0.000
					$\langle 1060 R^0, b^0, s_{\text{HB}}^2, s_{\text{free}}^0, t^0, s_X^0 \rangle$	1.16%	-0.005	0.000	0.001
					$\langle 1060 R^0, b^0, s_{\text{HB}}^2, s_{\text{free}}^0, t^1, s_X^0 \rangle$	0.79%	-0.001	0.000	0.000

					$\langle 1060 R^0, b^0, s_{\text{HB}}^1, s_{\text{free}}^0, t^0, s_X^0 \rangle$	0.01%	0.005	0.000	0.000
6257.8	0.060	0.002	0.000	0.000	$\langle 1162 R^0, b^2, s_{\text{HB}}^1, s_{\text{free}}^0, t^0, s_X^0 \rangle$	13.75%	-0.003	0.000	0.000
					$\langle 1162 R^1, b^3, s_{\text{HB}}^0, s_{\text{free}}^0, t^0, s_X^0 \rangle$	7.52%	0.000	0.000	0.000
					$\langle 1162 R^0, b^2, s_{\text{HB}}^1, s_{\text{free}}^0, t^1, s_X^0 \rangle$	5.34%	0.000	0.000	0.000
					$\langle 1162 R^1, b^3, s_{\text{HB}}^0, s_{\text{free}}^0, t^2, s_X^0 \rangle$	5.20%	0.000	0.000	0.000
					$\langle 1162 R^0, b^0, s_{\text{HB}}^2, s_{\text{free}}^0, t^0, s_X^0 \rangle$	0.15%	0.002	0.000	0.000
					$\langle 1162 R^0, b^0, s_{\text{HB}}^1, s_{\text{free}}^0, t^0, s_X^0 \rangle$	0.01%	0.005	0.000	0.000
6608.8	0.088	0.000	0.002	0.001	$\langle 1390 R^0, b^0, s_{\text{HB}}^1, s_{\text{free}}^1, t^0, s_X^0 \rangle$	14.14%	-0.012	0.003	0.003
					$\langle 1390 R^1, b^1, s_{\text{HB}}^0, s_{\text{free}}^1, t^1, s_X^0 \rangle$	8.91%	0.000	0.000	0.000
					$\langle 1390 R^0, b^0, s_{\text{HB}}^1, s_{\text{free}}^0, t^0, s_X^0 \rangle$	0.11%	0.015	0.001	-0.001
					$\langle 1390 R^0, b^0, s_{\text{HB}}^0, s_{\text{free}}^1, t^0, s_X^0 \rangle$	0.02%	-0.001	-0.002	-0.001
6626.7	0.075	-0.000	-0.002	-0.001	$\langle 1407 R^1, b^1, s_{\text{HB}}^0, s_{\text{free}}^1, t^1, s_X^0 \rangle$	19.21%	-0.001	0.000	0.000
					$\langle 1407 R^0, b^0, s_{\text{HB}}^1, s_{\text{free}}^1, t^0, s_X^0 \rangle$	12.80%	0.011	-0.003	-0.003
					$\langle 1407 R^0, b^0, s_{\text{HB}}^1, s_{\text{free}}^0, t^0, s_X^0 \rangle$	0.10%	-0.014	-0.001	0.001
					$\langle 1407 R^0, b^0, s_{\text{HB}}^0, s_{\text{free}}^1, t^0, s_X^0 \rangle$	0.02%	0.001	0.002	0.001
6988.6	2.925	-0.002	-0.011	-0.005	$\langle 1679 R^0, b^0, s_{\text{HB}}^0, s_{\text{free}}^2, t^0, s_X^0 \rangle$	86.27%	-0.015	-0.021	-0.013
					$\langle 1679 R^0, b^0, s_{\text{HB}}^0, s_{\text{free}}^1, t^0, s_X^0 \rangle$	0.42%	0.005	0.009	0.006
					$\langle 1679 R^0, b^0, s_{\text{HB}}^1, s_{\text{free}}^0, t^0, s_X^0 \rangle$	0.01%	0.004	0.000	0.000

MeOH₂ ··· (CO)₂

ω	I	μ_x	μ_y	μ_z	Assignment	$ c_n ^2$	$\mu_x^{g \rightarrow n}$	$\mu_y^{g \rightarrow n}$	$\mu_z^{g \rightarrow n}$
4016.4	0.061	-0.000	-0.000	-0.002	$\langle 905 R^1, b^0, s_{\text{sym}}^1, s_{\text{asym}}^0, t^0, s_X^0 \rangle$	47.69%	0.000	0.000	-0.002
					$\langle 905 R^0, b^0, s_{\text{sym}}^1, s_{\text{asym}}^1, t^0, s_X^0 \rangle$	0.04%	0.000	0.000	0.003
4039.9	0.123	0.000	0.000	0.003	$\langle 929 R^1, b^0, s_{\text{sym}}^1, s_{\text{asym}}^0, t^1, s_X^0 \rangle$	19.16%	0.000	0.000	0.002
					$\langle 929 R^1, b^0, s_{\text{sym}}^0, s_{\text{asym}}^1, t^0, s_X^0 \rangle$	4.81%	0.000	0.000	0.005
					$\langle 929 R^0, b^1, s_{\text{sym}}^0, s_{\text{asym}}^1, t^0, s_X^0 \rangle$	0.24%	0.000	0.000	0.002
					$\langle 929 R^0, b^0, s_{\text{sym}}^0, s_{\text{asym}}^1, t^0, s_X^0 \rangle$	0.00%	0.000	0.000	-0.003
4079.1	0.092	-0.000	-0.000	0.003	$\langle 972 R^1, b^0, s_{\text{sym}}^0, s_{\text{asym}}^1, t^0, s_X^0 \rangle$	31.16%	0.000	0.000	0.002
					$\langle 972 R^2, b^1, s_{\text{sym}}^0, s_{\text{asym}}^0, t^1, s_X^0 \rangle$	28.20%	0.000	0.000	0.000
					$\langle 972 R^2, b^1, s_{\text{sym}}^0, s_{\text{asym}}^0, t^0, s_X^0 \rangle$	16.33%	0.000	0.000	0.000
					$\langle 972 R^0, b^1, s_{\text{sym}}^0, s_{\text{asym}}^1, t^0, s_X^0 \rangle$	0.42%	0.000	0.000	0.002
					$\langle 972 R^0, b^0, s_{\text{sym}}^0, s_{\text{asym}}^1, t^0, s_X^0 \rangle$	0.00%	0.000	0.000	-0.004
4185.9	0.060	0.002	-0.001	0.000	$\langle 1052 R^3, b^0, s_{\text{sym}}^0, s_{\text{asym}}^0, t^1, s_X^0 \rangle$	37.18%	0.000	0.000	0.000
					$\langle 1052 R^1, b^2, s_{\text{sym}}^0, s_{\text{asym}}^0, t^0, s_X^0 \rangle$	20.97%	0.002	0.000	0.000
					$\langle 1052 R^1, b^0, s_{\text{sym}}^0, s_{\text{asym}}^1, t^0, s_X^0 \rangle$	3.37%	0.000	-0.002	0.000
					$\langle 1052 R^0, b^0, s_{\text{sym}}^1, s_{\text{asym}}^0, t^0, s_X^0 \rangle$	0.02%	0.000	0.005	0.000

4205.1	0.094	0.002	-0.002	0.000	$\langle 1069 R^1, b^0, s_{\text{sym}}^1, s_{\text{asym}}^0, t^2, s_X^0 \rangle$	9.00%	0.000	0.000	0.000
					$\langle 1069 R^1, b^0, s_{\text{sym}}^0, s_{\text{asym}}^1, t^0, s_X^0 \rangle$	7.42%	-0.001	-0.003	0.000
					$\langle 1069 R^2, b^1, s_{\text{sym}}^0, s_{\text{asym}}^0, t^0, s_X^0 \rangle$	5.15%	0.000	0.000	0.000
					$\langle 1069 R^1, b^0, s_{\text{sym}}^0, s_{\text{asym}}^0, t^0, s_X^0 \rangle$	0.02%	0.003	0.000	0.000
					$\langle 1069 R^0, b^0, s_{\text{sym}}^1, s_{\text{asym}}^0, t^0, s_X^0 \rangle$	0.01%	0.000	0.004	0.000
4209.5	0.109	-0.003	0.002	-0.000	$\langle 1074 R^1, b^0, s_{\text{sym}}^0, s_{\text{asym}}^1, t^0, s_X^0 \rangle$	15.74%	0.001	0.004	0.000
					$\langle 1074 R^2, b^1, s_{\text{sym}}^0, s_{\text{asym}}^0, t^0, s_X^0 \rangle$	9.19%	0.000	0.000	0.000
					$\langle 1074 R^1, b^0, s_{\text{sym}}^1, s_{\text{asym}}^0, t^2, s_X^0 \rangle$	7.77%	0.000	0.000	0.000
					$\langle 1074 R^0, b^0, s_{\text{sym}}^1, s_{\text{asym}}^0, t^0, s_X^0 \rangle$	0.02%	0.000	-0.005	0.000
					$\langle 1074 R^1, b^0, s_{\text{sym}}^0, s_{\text{asym}}^0, t^0, s_X^0 \rangle$	0.01%	-0.002	0.000	0.000
4283.1	0.122	0.000	-0.000	0.003	$\langle 1122 R^1, b^0, s_{\text{sym}}^1, s_{\text{asym}}^0, t^0, s_X^0 \rangle$	19.99%	0.000	0.000	-0.006
					$\langle 1122 R^0, b^1, s_{\text{sym}}^0, s_{\text{asym}}^1, t^0, s_X^0 \rangle$	1.47%	0.000	0.000	0.004
					$\langle 1122 R^0, b^0, s_{\text{sym}}^0, s_{\text{asym}}^1, t^0, s_X^0 \rangle$	0.01%	0.000	0.000	0.006
4296.5	0.127	0.000	0.000	0.003	$\langle 1134 R^0, b^1, s_{\text{sym}}^0, s_{\text{asym}}^1, t^0, s_X^0 \rangle$	5.20%	0.000	0.000	0.008
					$\langle 1134 R^1, b^2, s_{\text{sym}}^0, s_{\text{asym}}^0, t^0, s_X^0 \rangle$	5.16%	0.000	0.000	0.000
					$\langle 1134 R^0, b^0, s_{\text{sym}}^0, s_{\text{asym}}^1, t^0, s_X^0 \rangle$	0.01%	0.000	0.000	-0.006
					$\langle 1134 R^0, b^0, s_{\text{sym}}^1, s_{\text{asym}}^1, t^0, s_X^0 \rangle$	0.01%	0.000	0.000	-0.001
4299.9	0.155	0.000	0.000	-0.004	$\langle 1138 R^1, b^2, s_{\text{sym}}^0, s_{\text{asym}}^0, t^0, s_X^0 \rangle$	36.52%	0.000	0.000	0.001
					$\langle 1138 R^0, b^1, s_{\text{sym}}^0, s_{\text{asym}}^1, t^0, s_X^0 \rangle$	16.49%	0.000	0.000	-0.014
					$\langle 1138 R^1, b^0, s_{\text{sym}}^1, s_{\text{asym}}^0, t^0, s_X^0 \rangle$	2.53%	0.000	0.000	-0.002
					$\langle 1138 R^0, b^0, s_{\text{sym}}^0, s_{\text{asym}}^1, t^0, s_X^0 \rangle$	0.04%	0.000	0.000	0.011
4412.1	0.140	-0.000	0.004	0.000	$\langle 1231 R^0, b^0, s_{\text{sym}}^0, s_{\text{asym}}^0, t^0, s_X^2 \rangle$	96.35%	0.000	0.004	0.000
					$\langle 1231 R^0, b^0, s_{\text{sym}}^0, s_{\text{asym}}^0, t^1, s_X^0 \rangle$	0.00%	0.000	0.000	0.000
4412.5	0.446	-0.000	0.000	0.006	$\langle 1234 R^0, b^0, s_{\text{sym}}^0, s_{\text{asym}}^0, t^0, s_X^2 \rangle$	96.23%	0.000	0.000	0.006
					$\langle 1234 R^0, b^0, s_{\text{sym}}^0, s_{\text{asym}}^0, t^1, s_X^0 \rangle$	0.00%	0.000	0.000	0.000
4450.4	0.080	-0.000	0.000	0.003	$\langle 1258 R^1, b^2, s_{\text{sym}}^0, s_{\text{asym}}^0, t^1, s_X^0 \rangle$	21.31%	0.000	0.000	0.000
					$\langle 1258 R^0, b^1, s_{\text{sym}}^0, s_{\text{asym}}^1, t^1, s_X^0 \rangle$	20.49%	0.000	0.000	0.004
					$\langle 1258 R^0, b^1, s_{\text{sym}}^0, s_{\text{asym}}^1, t^0, s_X^0 \rangle$	2.34%	0.000	0.000	0.005
					$\langle 1258 R^0, b^0, s_{\text{sym}}^0, s_{\text{asym}}^1, t^0, s_X^0 \rangle$	0.02%	0.000	0.000	-0.007
4450.4	0.077	-0.002	0.002	-0.000	$\langle 1259 R^2, b^1, s_{\text{sym}}^0, s_{\text{asym}}^0, t^4, s_X^0 \rangle$	6.01%	0.000	0.000	0.000
					$\langle 1259 R^1, b^0, s_{\text{sym}}^0, s_{\text{asym}}^1, t^0, s_X^0 \rangle$	5.46%	0.000	0.003	0.000
					$\langle 1259 R^1, b^0, s_{\text{sym}}^0, s_{\text{asym}}^0, t^0, s_X^0 \rangle$	0.00%	-0.001	0.000	0.000
4460.2	0.051	-0.000	0.000	0.002	$\langle 1265 R^1, b^0, s_{\text{sym}}^1, s_{\text{asym}}^0, t^1, s_X^0 \rangle$	23.16%	0.000	0.000	0.000
					$\langle 1265 R^0, b^1, s_{\text{sym}}^0, s_{\text{asym}}^1, t^0, s_X^0 \rangle$	1.85%	0.000	0.000	0.005
					$\langle 1265 R^1, b^0, s_{\text{sym}}^1, s_{\text{asym}}^0, t^0, s_X^0 \rangle$	1.11%	0.000	0.000	-0.001
					$\langle 1265 R^0, b^0, s_{\text{sym}}^0, s_{\text{asym}}^1, t^0, s_X^0 \rangle$	0.00%	0.000	0.000	-0.003
4490.1	0.316	-0.000	0.000	-0.005	$\langle 1288 R^0, b^1, s_{\text{sym}}^0, s_{\text{asym}}^1, t^0, s_X^0 \rangle$	12.56%	0.000	0.000	-0.012
					$\langle 1288 R^1, b^2, s_{\text{sym}}^0, s_{\text{asym}}^0, t^0, s_X^0 \rangle$	12.07%	0.000	0.000	0.000
					$\langle 1288 R^2, b^0, s_{\text{sym}}^0, s_{\text{asym}}^1, t^0, s_X^0 \rangle$	0.15%	0.000	0.000	-0.001
					$\langle 1288 R^0, b^0, s_{\text{sym}}^0, s_{\text{asym}}^1, t^0, s_X^0 \rangle$	0.02%	0.000	0.000	0.009
4491.2	0.239	0.000	0.000	-0.005	$\langle 1290 R^2, b^1, s_{\text{sym}}^0, s_{\text{asym}}^0, t^4, s_X^0 \rangle$	11.04%	0.000	0.000	0.000

					$\langle 1290 R^0, b^1, s_{\text{sym}}^0, s_{\text{asym}}^1, t^0, s_X^0 \rangle$	9.62%	0.000	0.000	-0.011
					$\langle 1290 R^1, b^2, s_{\text{sym}}^0, s_{\text{asym}}^0, t^0, s_X^0 \rangle$	9.24%	0.000	0.000	0.000
					$\langle 1290 R^2, b^0, s_{\text{sym}}^0, s_{\text{asym}}^1, t^0, s_X^0 \rangle$	0.12%	0.000	0.000	-0.001
					$\langle 1290 R^0, b^0, s_{\text{sym}}^0, s_{\text{asym}}^1, t^0, s_X^0 \rangle$	0.02%	0.000	0.000	0.008
4498.4	0.073	0.000	-0.000	-0.003	$\langle 1295 R^2, b^1, s_{\text{sym}}^0, s_{\text{asym}}^0, t^3, s_X^0 \rangle$	14.64%	0.000	0.000	0.000
					$\langle 1295 R^1, b^0, s_{\text{sym}}^0, s_{\text{asym}}^1, t^3, s_X^0 \rangle$	11.78%	0.000	0.000	0.000
					$\langle 1295 R^0, b^1, s_{\text{sym}}^0, s_{\text{asym}}^1, t^0, s_X^0 \rangle$	2.85%	0.000	0.000	-0.006
					$\langle 1295 R^2, b^0, s_{\text{sym}}^0, s_{\text{asym}}^1, t^0, s_X^0 \rangle$	0.04%	0.000	0.000	-0.001
					$\langle 1295 R^0, b^0, s_{\text{sym}}^0, s_{\text{asym}}^1, t^0, s_X^0 \rangle$	0.01%	0.000	0.000	0.005
4524.2	0.057	-0.000	-0.000	0.002	$\langle 1324 R^2, b^1, s_{\text{sym}}^0, s_{\text{asym}}^0, t^1, s_X^0 \rangle$	29.98%	0.000	0.000	0.000
					$\langle 1324 R^0, b^1, s_{\text{sym}}^0, s_{\text{asym}}^1, t^0, s_X^0 \rangle$	1.88%	0.000	0.000	0.005
					$\langle 1324 R^1, b^0, s_{\text{sym}}^1, s_{\text{asym}}^0, t^0, s_X^0 \rangle$	0.46%	0.000	0.000	0.001
					$\langle 1324 R^0, b^0, s_{\text{sym}}^0, s_{\text{asym}}^1, t^0, s_X^0 \rangle$	0.00%	0.000	0.000	-0.004
4538.6	0.061	-0.001	0.002	-0.000	$\langle 1331 R^1, b^2, s_{\text{sym}}^0, s_{\text{asym}}^0, t^2, s_X^0 \rangle$	41.90%	0.000	0.000	0.000
					$\langle 1331 R^0, b^1, s_{\text{sym}}^1, s_{\text{asym}}^0, t^0, s_X^0 \rangle$	8.66%	0.000	-0.004	0.000
					$\langle 1331 R^0, b^0, s_{\text{sym}}^1, s_{\text{asym}}^0, t^0, s_X^0 \rangle$	0.03%	-0.001	0.006	0.000
					$\langle 1331 R^0, b^1, s_{\text{sym}}^0, s_{\text{asym}}^0, t^0, s_X^0 \rangle$	0.02%	0.000	-0.001	0.000
4546.3	0.074	-0.001	0.002	0.000	$\langle 1338 R^0, b^1, s_{\text{sym}}^1, s_{\text{asym}}^0, t^0, s_X^0 \rangle$	6.49%	0.000	-0.003	0.000
					$\langle 1338 R^0, b^0, s_{\text{sym}}^1, s_{\text{asym}}^0, t^0, s_X^0 \rangle$	0.02%	-0.001	0.006	0.000
					$\langle 1338 R^1, b^0, s_{\text{sym}}^0, s_{\text{asym}}^0, t^0, s_X^0 \rangle$	0.00%	-0.001	0.000	0.000
4547.5	0.092	0.001	-0.003	-0.000	$\langle 1340 R^1, b^2, s_{\text{sym}}^0, s_{\text{asym}}^0, t^2, s_X^0 \rangle$	19.89%	0.000	0.000	0.000
					$\langle 1340 R^0, b^1, s_{\text{sym}}^1, s_{\text{asym}}^0, t^0, s_X^0 \rangle$	17.78%	0.000	0.005	0.000
					$\langle 1340 R^0, b^0, s_{\text{sym}}^1, s_{\text{asym}}^0, t^0, s_X^0 \rangle$	0.06%	0.001	-0.009	0.000
					$\langle 1340 R^0, b^1, s_{\text{sym}}^0, s_{\text{asym}}^0, t^0, s_X^0 \rangle$	0.04%	0.000	0.002	0.000
4675.9	0.086	-0.000	-0.000	0.003	$\langle 1468 R^1, b^2, s_{\text{sym}}^0, s_{\text{asym}}^0, t^2, s_X^0 \rangle$	28.06%	0.000	0.000	0.000
					$\langle 1468 R^1, b^2, s_{\text{sym}}^0, s_{\text{asym}}^0, t^0, s_X^0 \rangle$	7.27%	0.000	0.000	0.000
					$\langle 1468 R^0, b^1, s_{\text{sym}}^0, s_{\text{asym}}^1, t^1, s_X^0 \rangle$	4.92%	0.000	0.000	-0.001
					$\langle 1468 R^0, b^1, s_{\text{sym}}^0, s_{\text{asym}}^1, t^0, s_X^0 \rangle$	2.82%	0.000	0.000	0.006
					$\langle 1468 R^0, b^0, s_{\text{sym}}^0, s_{\text{asym}}^1, t^0, s_X^0 \rangle$	0.00%	0.000	0.000	-0.002
4701.6	0.149	0.000	-0.000	-0.004	$\langle 1491 R^3, b^1, s_{\text{sym}}^0, s_{\text{asym}}^0, t^1, s_X^0 \rangle$	43.58%	0.000	0.000	0.000
					$\langle 1491 R^0, b^1, s_{\text{sym}}^0, s_{\text{asym}}^1, t^0, s_X^0 \rangle$	4.13%	0.000	0.000	-0.007
					$\langle 1491 R^2, b^0, s_{\text{sym}}^0, s_{\text{asym}}^1, t^0, s_X^0 \rangle$	2.09%	0.000	0.000	0.004
					$\langle 1491 R^0, b^0, s_{\text{sym}}^1, s_{\text{asym}}^1, t^0, s_X^0 \rangle$	0.08%	0.000	0.000	-0.004
4711.3	0.055	0.000	0.000	0.002	$\langle 1508 R^2, b^1, s_{\text{sym}}^0, s_{\text{asym}}^0, t^2, s_X^0 \rangle$	4.99%	0.000	0.000	0.000
					$\langle 1508 R^2, b^0, s_{\text{sym}}^0, s_{\text{asym}}^1, t^0, s_X^0 \rangle$	2.09%	0.000	0.000	0.004
					$\langle 1508 R^0, b^1, s_{\text{sym}}^0, s_{\text{asym}}^1, t^0, s_X^0 \rangle$	1.29%	0.000	0.000	0.004
					$\langle 1508 R^0, b^0, s_{\text{sym}}^0, s_{\text{asym}}^1, t^0, s_X^0 \rangle$	0.00%	0.000	0.000	-0.004
4718.9	0.158	-0.000	-0.000	-0.004	$\langle 1516 R^2, b^0, s_{\text{sym}}^0, s_{\text{asym}}^1, t^0, s_X^0 \rangle$	8.00%	0.000	0.000	-0.008
					$\langle 1516 R^1, b^2, s_{\text{sym}}^0, s_{\text{asym}}^0, t^0, s_X^0 \rangle$	5.39%	0.000	0.000	0.000
					$\langle 1516 R^0, b^1, s_{\text{sym}}^0, s_{\text{asym}}^1, t^0, s_X^0 \rangle$	3.44%	0.000	0.000	-0.007
					$\langle 1516 R^0, b^0, s_{\text{sym}}^1, s_{\text{asym}}^1, t^0, s_X^0 \rangle$	0.39%	0.000	0.000	0.008
4727.6	0.094	-0.000	-0.000	-0.003	$\langle 1529 R^2, b^0, s_{\text{sym}}^0, s_{\text{asym}}^1, t^0, s_X^0 \rangle$	17.24%	0.000	0.000	0.011

					$\langle 1529 R^1, b^2, s_{\text{sym}}^0, s_{\text{asym}}^0, t^3, s_X^0 \rangle$	11.68%	0.000	0.000	0.000
					$\langle 1529 R^3, b^1, s_{\text{sym}}^0, s_{\text{asym}}^0, t^0, s_X^0 \rangle$	11.03%	0.000	0.000	0.000
					$\langle 1529 R^0, b^1, s_{\text{sym}}^0, s_{\text{asym}}^1, t^0, s_X^0 \rangle$	2.66%	0.000	0.000	-0.006
					$\langle 1529 R^0, b^0, s_{\text{sym}}^1, s_{\text{asym}}^1, t^0, s_X^0 \rangle$	0.78%	0.000	0.000	-0.012
4736.1	0.065	0.000	0.000	0.002	$\langle 1537 R^1, b^2, s_{\text{sym}}^0, s_{\text{asym}}^0, t^3, s_X^0 \rangle$	56.72%	0.000	0.000	0.000
					$\langle 1537 R^0, b^1, s_{\text{sym}}^0, s_{\text{asym}}^1, t^0, s_X^0 \rangle$	1.49%	0.000	0.000	0.004
					$\langle 1537 R^2, b^0, s_{\text{sym}}^0, s_{\text{asym}}^1, t^0, s_X^0 \rangle$	1.25%	0.000	0.000	-0.003
					$\langle 1537 R^0, b^0, s_{\text{sym}}^1, s_{\text{asym}}^1, t^0, s_X^0 \rangle$	0.05%	0.000	0.000	0.003
4915.9	0.085	-0.001	0.002	0.000	$\langle 1742 R^3, b^1, s_{\text{sym}}^0, s_{\text{asym}}^0, t^0, s_X^0 \rangle$	26.20%	0.000	0.000	0.000
					$\langle 1742 R^2, b^0, s_{\text{sym}}^0, s_{\text{asym}}^1, t^0, s_X^0 \rangle$	16.19%	0.001	0.001	0.000
					$\langle 1742 R^0, b^0, s_{\text{sym}}^0, s_{\text{asym}}^2, t^0, s_X^0 \rangle$	0.75%	0.000	-0.005	0.000
					$\langle 1742 R^0, b^0, s_{\text{sym}}^1, s_{\text{asym}}^0, t^0, s_X^0 \rangle$	0.03%	-0.001	0.007	0.000
					$\langle 1742 R^1, b^0, s_{\text{sym}}^0, s_{\text{asym}}^0, t^0, s_X^0 \rangle$	0.01%	-0.002	0.000	0.000
4916.2	0.144	-0.000	0.000	0.003	$\langle 1743 R^1, b^1, s_{\text{sym}}^0, s_{\text{asym}}^0, t^0, s_X^1 \rangle$	73.66%	0.000	0.000	0.000
					$\langle 1743 R^0, b^0, s_{\text{sym}}^0, s_{\text{asym}}^1, t^0, s_X^1 \rangle$	15.15%	0.000	0.000	0.004
					$\langle 1743 R^0, b^0, s_{\text{sym}}^0, s_{\text{asym}}^1, t^0, s_X^0 \rangle$	0.00%	0.000	0.000	0.001
5030.3	0.052	0.000	-0.000	0.002	$\langle 1895 R^2, b^0, s_{\text{sym}}^1, s_{\text{asym}}^0, t^1, s_X^0 \rangle$	19.82%	0.000	0.000	-0.004
					$\langle 1895 R^3, b^1, s_{\text{sym}}^0, s_{\text{asym}}^0, t^2, s_X^0 \rangle$	15.15%	0.000	0.000	0.000
					$\langle 1895 R^2, b^0, s_{\text{sym}}^0, s_{\text{asym}}^1, t^0, s_X^0 \rangle$	1.01%	0.000	0.000	-0.003
					$\langle 1895 R^0, b^0, s_{\text{sym}}^0, s_{\text{asym}}^1, t^0, s_X^0 \rangle$	0.02%	0.000	0.000	0.009
					$\langle 1895 R^0, b^0, s_{\text{sym}}^0, s_{\text{asym}}^0, t^1, s_X^0 \rangle$	0.01%	0.000	0.001	0.002
5058.3	0.089	0.000	-0.000	-0.003	$\langle 1940 R^2, b^0, s_{\text{sym}}^0, s_{\text{asym}}^0, t^1, s_X^1 \rangle$	23.08%	0.000	0.000	0.000
					$\langle 1940 R^2, b^0, s_{\text{sym}}^0, s_{\text{asym}}^1, t^0, s_X^0 \rangle$	0.38%	0.000	0.000	-0.001
					$\langle 1940 R^0, b^0, s_{\text{sym}}^1, s_{\text{asym}}^1, t^0, s_X^0 \rangle$	0.06%	0.000	0.000	0.003
					$\langle 1940 R^0, b^0, s_{\text{sym}}^0, s_{\text{asym}}^1, t^0, s_X^0 \rangle$	0.00%	0.000	0.000	-0.002
5064.2	0.080	-0.000	0.000	0.003	$\langle 1949 R^1, b^1, s_{\text{sym}}^0, s_{\text{asym}}^0, t^1, s_X^1 \rangle$	25.24%	0.000	0.000	0.000
					$\langle 1949 R^0, b^0, s_{\text{sym}}^0, s_{\text{asym}}^1, t^0, s_X^1 \rangle$	2.61%	0.000	0.000	0.001
					$\langle 1949 R^0, b^0, s_{\text{sym}}^1, s_{\text{asym}}^1, t^0, s_X^0 \rangle$	0.01%	0.000	0.000	-0.001
					$\langle 1949 R^0, b^0, s_{\text{sym}}^0, s_{\text{asym}}^1, t^0, s_X^0 \rangle$	0.00%	0.000	0.000	0.001
5079.0	0.177	-0.000	0.000	0.004	$\langle 1968 R^3, b^1, s_{\text{sym}}^0, s_{\text{asym}}^0, t^0, s_X^0 \rangle$	45.24%	0.000	0.000	0.000
					$\langle 1968 R^2, b^0, s_{\text{sym}}^0, s_{\text{asym}}^1, t^0, s_X^0 \rangle$	23.90%	0.000	0.000	0.016
					$\langle 1968 R^0, b^0, s_{\text{sym}}^1, s_{\text{asym}}^1, t^0, s_X^0 \rangle$	1.37%	0.000	0.000	-0.016
5092.7	0.284	-0.000	0.000	0.005	$\langle 1986 R^0, b^0, s_{\text{sym}}^0, s_{\text{asym}}^1, t^0, s_X^1 \rangle$	34.38%	0.000	0.000	0.006
					$\langle 1986 R^1, b^1, s_{\text{sym}}^0, s_{\text{asym}}^0, t^0, s_X^1 \rangle$	19.20%	0.000	0.000	0.000
					$\langle 1986 R^0, b^0, s_{\text{sym}}^0, s_{\text{asym}}^1, t^0, s_X^0 \rangle$	0.00%	0.000	0.000	0.001
5092.9	0.108	0.000	-0.003	-0.000	$\langle 1987 R^0, b^0, s_{\text{sym}}^0, s_{\text{asym}}^1, t^0, s_X^1 \rangle$	36.06%	0.000	-0.002	0.000
					$\langle 1987 R^1, b^1, s_{\text{sym}}^0, s_{\text{asym}}^0, t^0, s_X^1 \rangle$	20.25%	0.000	0.000	0.000
					$\langle 1987 R^0, b^0, s_{\text{sym}}^1, s_{\text{asym}}^0, t^0, s_X^0 \rangle$	0.00%	0.000	-0.001	0.000
5138.7	0.064	-0.001	0.002	-0.000	$\langle 2038 R^2, b^0, s_{\text{sym}}^1, s_{\text{asym}}^0, t^0, s_X^0 \rangle$	20.03%	0.000	0.007	0.000
					$\langle 2038 R^4, b^0, s_{\text{sym}}^0, s_{\text{asym}}^0, t^0, s_X^0 \rangle$	9.33%	0.000	0.000	0.000
					$\langle 2038 R^3, b^1, s_{\text{sym}}^0, s_{\text{asym}}^0, t^2, s_X^0 \rangle$	5.06%	0.000	0.000	0.000

					$\langle 2038 R^0, b^0, s_{\text{sym}}^1, s_{\text{asym}}^0, t^0, s_X^0 \rangle$	0.01%	0.000	-0.003	0.000
5143.0	0.143	0.001	-0.003	0.000	$\langle 2042 R^0, b^0, s_{\text{sym}}^1, s_{\text{asym}}^0, t^0, s_X^1 \rangle$	16.12%	0.000	0.000	0.000
					$\langle 2042 R^2, b^0, s_{\text{sym}}^0, s_{\text{asym}}^1, t^0, s_X^0 \rangle$	12.94%	0.000	-0.001	0.000
					$\langle 2042 R^3, b^1, s_{\text{sym}}^0, s_{\text{asym}}^0, t^0, s_X^0 \rangle$	8.64%	0.000	0.000	0.000
					$\langle 2042 R^2, b^0, s_{\text{sym}}^1, s_{\text{asym}}^0, t^0, s_X^0 \rangle$	1.84%	0.000	0.003	0.000
					$\langle 2042 R^0, b^0, s_{\text{sym}}^0, s_{\text{asym}}^2, t^0, s_X^0 \rangle$	0.56%	0.000	0.004	0.000
					$\langle 2042 R^0, b^0, s_{\text{sym}}^1, s_{\text{asym}}^0, t^0, s_X^0 \rangle$	0.08%	0.001	-0.011	0.000
5143.6	0.261	0.000	-0.000	0.005	$\langle 2043 R^0, b^0, s_{\text{sym}}^1, s_{\text{asym}}^0, t^0, s_X^1 \rangle$	32.38%	0.000	0.000	0.000
					$\langle 2043 R^1, b^1, s_{\text{sym}}^0, s_{\text{asym}}^0, t^2, s_X^1 \rangle$	15.40%	0.000	0.000	0.000
					$\langle 2043 R^0, b^0, s_{\text{sym}}^0, s_{\text{asym}}^0, t^0, s_X^1 \rangle$	0.16%	0.000	0.000	0.006
					$\langle 2043 R^0, b^0, s_{\text{sym}}^0, s_{\text{asym}}^1, t^0, s_X^0 \rangle$	0.00%	0.000	0.000	0.003
5144.9	0.055	0.000	0.000	0.002	$\langle 2047 R^1, b^1, s_{\text{sym}}^0, s_{\text{asym}}^0, t^2, s_X^1 \rangle$	69.64%	0.000	0.000	0.000
					$\langle 2047 R^0, b^0, s_{\text{sym}}^0, s_{\text{asym}}^0, t^0, s_X^1 \rangle$	0.04%	0.000	0.000	0.002
					$\langle 2047 R^0, b^0, s_{\text{sym}}^0, s_{\text{asym}}^1, t^0, s_X^0 \rangle$	0.00%	0.000	0.000	0.001
5249.5	0.076	-0.000	-0.000	0.002	$\langle 2201 R^1, b^1, s_{\text{sym}}^0, s_{\text{asym}}^0, t^0, s_X^1 \rangle$	37.20%	0.000	0.000	0.000
					$\langle 2201 R^0, b^0, s_{\text{sym}}^0, s_{\text{asym}}^1, t^0, s_X^1 \rangle$	2.85%	0.000	0.000	0.001
					$\langle 2201 R^0, b^0, s_{\text{sym}}^1, s_{\text{asym}}^1, t^0, s_X^0 \rangle$	0.01%	0.000	0.000	-0.001
					$\langle 2201 R^0, b^0, s_{\text{sym}}^0, s_{\text{asym}}^1, t^0, s_X^0 \rangle$	0.00%	0.000	0.000	0.001
5262.0	0.144	-0.000	0.000	0.003	$\langle 2219 R^2, b^0, s_{\text{sym}}^1, s_{\text{asym}}^0, t^0, s_X^0 \rangle$	21.27%	0.000	0.000	0.001
					$\langle 2219 R^2, b^0, s_{\text{sym}}^0, s_{\text{asym}}^2, t^0, s_X^0 \rangle$	0.70%	0.000	0.000	-0.002
					$\langle 2219 R^0, b^0, s_{\text{sym}}^1, s_{\text{asym}}^1, t^0, s_X^0 \rangle$	0.65%	0.000	0.000	-0.011
					$\langle 2219 R^0, b^0, s_{\text{sym}}^0, s_{\text{asym}}^1, t^0, s_X^0 \rangle$	0.14%	0.000	0.000	0.021
5263.6	0.099	0.000	-0.000	0.003	$\langle 2222 R^3, b^1, s_{\text{sym}}^0, s_{\text{asym}}^0, t^3, s_X^0 \rangle$	24.28%	0.000	0.000	0.000
					$\langle 2222 R^0, b^0, s_{\text{sym}}^1, s_{\text{asym}}^1, t^0, s_X^0 \rangle$	0.34%	0.000	0.000	-0.008
					$\langle 2222 R^0, b^0, s_{\text{sym}}^1, s_{\text{asym}}^1, t^1, s_X^0 \rangle$	0.20%	0.000	-0.001	-0.001
					$\langle 2222 R^0, b^0, s_{\text{sym}}^0, s_{\text{asym}}^1, t^0, s_X^0 \rangle$	0.08%	0.000	0.000	0.016
5269.8	0.067	0.000	0.000	0.002	$\langle 2233 R^3, b^1, s_{\text{sym}}^0, s_{\text{asym}}^0, t^2, s_X^0 \rangle$	3.92%	0.000	0.000	0.000
					$\langle 2233 R^0, b^0, s_{\text{sym}}^1, s_{\text{asym}}^1, t^1, s_X^0 \rangle$	0.23%	0.000	-0.001	-0.001
					$\langle 2233 R^0, b^0, s_{\text{sym}}^1, s_{\text{asym}}^1, t^0, s_X^0 \rangle$	0.22%	0.000	0.000	-0.006
					$\langle 2233 R^0, b^0, s_{\text{sym}}^0, s_{\text{asym}}^1, t^0, s_X^0 \rangle$	0.04%	0.000	0.000	0.012
5290.1	0.053	-0.000	0.000	-0.002	$\langle 2261 R^2, b^0, s_{\text{sym}}^0, s_{\text{asym}}^1, t^0, s_X^0 \rangle$	30.40%	0.000	0.000	-0.002
					$\langle 2261 R^3, b^1, s_{\text{sym}}^0, s_{\text{asym}}^0, t^0, s_X^0 \rangle$	17.60%	0.000	0.000	0.000
					$\langle 2261 R^0, b^0, s_{\text{sym}}^1, s_{\text{asym}}^1, t^0, s_X^0 \rangle$	0.29%	0.000	0.000	0.007
					$\langle 2261 R^0, b^0, s_{\text{sym}}^0, s_{\text{asym}}^1, t^0, s_X^0 \rangle$	0.03%	0.000	0.000	-0.010
5301.6	0.958	-0.000	0.000	-0.008	$\langle 2271 R^3, b^1, s_{\text{sym}}^0, s_{\text{asym}}^0, t^0, s_X^0 \rangle$	20.74%	0.000	0.000	0.000
					$\langle 2271 R^2, b^0, s_{\text{sym}}^0, s_{\text{asym}}^1, t^0, s_X^0 \rangle$	9.53%	0.000	0.000	-0.005
					$\langle 2271 R^0, b^0, s_{\text{sym}}^1, s_{\text{asym}}^1, t^0, s_X^0 \rangle$	4.00%	0.000	0.000	0.027
					$\langle 2271 R^0, b^0, s_{\text{sym}}^0, s_{\text{asym}}^1, t^0, s_X^0 \rangle$	0.53%	0.000	0.000	-0.042
5302.0	0.229	0.001	-0.004	-0.000	$\langle 2272 R^2, b^0, s_{\text{sym}}^0, s_{\text{asym}}^1, t^1, s_X^0 \rangle$	10.67%	0.000	0.000	0.000
					$\langle 2272 R^0, b^0, s_{\text{sym}}^0, s_{\text{asym}}^2, t^0, s_X^0 \rangle$	1.78%	-0.001	0.007	0.000
					$\langle 2272 R^0, b^0, s_{\text{sym}}^1, s_{\text{asym}}^2, t^0, s_X^0 \rangle$	0.82%	0.000	0.003	0.000

					$\langle 2272 R^0, b^0, s_{\text{sym}}^1, s_{\text{asym}}^0, t^0, s_X^0 \rangle$	0.19%	0.002	-0.017	0.000
5303.8	0.066	-0.001	0.002	0.000	$\langle 2274 R^4, b^0, s_{\text{sym}}^0, s_{\text{asym}}^0, t^3, s_X^0 \rangle$	25.00%	0.000	0.000	0.000
					$\langle 2274 R^0, b^0, s_{\text{sym}}^0, s_{\text{asym}}^2, t^0, s_X^0 \rangle$	0.47%	0.000	-0.004	0.000
					$\langle 2274 R^0, b^0, s_{\text{sym}}^1, s_{\text{asym}}^2, t^0, s_X^0 \rangle$	0.24%	0.000	-0.001	0.000
					$\langle 2274 R^0, b^0, s_{\text{sym}}^1, s_{\text{asym}}^0, t^0, s_X^0 \rangle$	0.06%	-0.001	0.009	0.000
5311.2	0.079	-0.000	-0.000	-0.002	$\langle 2288 R^0, b^0, s_{\text{sym}}^1, s_{\text{asym}}^0, t^1, s_X^1 \rangle$	22.93%	0.000	0.000	0.000
					$\langle 2288 R^0, b^0, s_{\text{sym}}^0, s_{\text{asym}}^1, t^0, s_X^1 \rangle$	4.21%	0.000	-0.001	-0.001
					$\langle 2288 R^0, b^0, s_{\text{sym}}^1, s_{\text{asym}}^1, t^0, s_X^0 \rangle$	0.07%	0.000	0.000	0.004
					$\langle 2288 R^0, b^0, s_{\text{sym}}^0, s_{\text{asym}}^1, t^0, s_X^0 \rangle$	0.01%	0.000	0.000	-0.004
5313.5	0.096	-0.001	0.003	-0.000	$\langle 2290 R^3, b^1, s_{\text{sym}}^0, s_{\text{asym}}^0, t^2, s_X^0 \rangle$	4.40%	0.000	0.000	0.000
					$\langle 2290 R^0, b^0, s_{\text{sym}}^0, s_{\text{asym}}^2, t^0, s_X^0 \rangle$	1.00%	0.000	-0.006	0.000
					$\langle 2290 R^0, b^0, s_{\text{sym}}^1, s_{\text{asym}}^2, t^0, s_X^0 \rangle$	0.39%	0.000	-0.002	0.000
					$\langle 2290 R^0, b^0, s_{\text{sym}}^1, s_{\text{asym}}^0, t^0, s_X^0 \rangle$	0.06%	-0.001	0.010	0.000
5316.0	0.055	-0.001	0.002	0.000	$\langle 2294 R^3, b^1, s_{\text{sym}}^0, s_{\text{asym}}^0, t^2, s_X^0 \rangle$	3.96%	0.000	0.000	0.000
					$\langle 2294 R^0, b^0, s_{\text{sym}}^0, s_{\text{asym}}^2, t^0, s_X^0 \rangle$	0.46%	0.000	-0.004	0.000
					$\langle 2294 R^0, b^0, s_{\text{sym}}^1, s_{\text{asym}}^2, t^0, s_X^0 \rangle$	0.20%	0.000	-0.001	0.000
					$\langle 2294 R^0, b^0, s_{\text{sym}}^1, s_{\text{asym}}^0, t^0, s_X^0 \rangle$	0.03%	-0.001	0.007	0.000
5318.8	0.116	-0.000	0.000	0.003	$\langle 2299 R^4, b^0, s_{\text{sym}}^0, s_{\text{asym}}^0, t^1, s_X^0 \rangle$	33.98%	0.000	0.000	0.000
					$\langle 2299 R^2, b^0, s_{\text{sym}}^0, s_{\text{asym}}^1, t^0, s_X^0 \rangle$	5.34%	0.000	0.000	0.004
					$\langle 2299 R^0, b^0, s_{\text{sym}}^1, s_{\text{asym}}^1, t^0, s_X^0 \rangle$	0.86%	0.000	0.000	-0.012
					$\langle 2299 R^0, b^0, s_{\text{sym}}^0, s_{\text{asym}}^1, t^0, s_X^0 \rangle$	0.04%	0.000	0.000	0.012
5319.0	0.058	0.001	-0.002	-0.000	$\langle 2300 R^3, b^1, s_{\text{sym}}^0, s_{\text{asym}}^0, t^2, s_X^0 \rangle$	4.25%	0.000	0.000	0.000
					$\langle 2300 R^0, b^0, s_{\text{sym}}^0, s_{\text{asym}}^2, t^0, s_X^0 \rangle$	0.64%	0.000	0.004	0.000
					$\langle 2300 R^0, b^0, s_{\text{sym}}^1, s_{\text{asym}}^2, t^0, s_X^0 \rangle$	0.24%	0.000	0.001	0.000
					$\langle 2300 R^0, b^0, s_{\text{sym}}^1, s_{\text{asym}}^0, t^0, s_X^0 \rangle$	0.05%	0.001	-0.009	0.000
5323.7	0.056	0.000	0.000	0.002	$\langle 2304 R^4, b^0, s_{\text{sym}}^0, s_{\text{asym}}^0, t^1, s_X^0 \rangle$	3.71%	0.000	0.000	0.000
					$\langle 2304 R^2, b^0, s_{\text{sym}}^0, s_{\text{asym}}^1, t^0, s_X^0 \rangle$	3.00%	0.000	0.000	0.003
					$\langle 2304 R^0, b^0, s_{\text{sym}}^1, s_{\text{asym}}^1, t^0, s_X^0 \rangle$	0.43%	0.000	0.000	-0.009
					$\langle 2304 R^0, b^0, s_{\text{sym}}^0, s_{\text{asym}}^1, t^0, s_X^0 \rangle$	0.02%	0.000	0.000	0.009
5339.7	0.092	0.001	-0.003	-0.000	$\langle 2323 R^3, b^1, s_{\text{sym}}^0, s_{\text{asym}}^0, t^1, s_X^0 \rangle$	4.94%	0.000	0.000	0.000
					$\langle 2323 R^0, b^0, s_{\text{sym}}^0, s_{\text{asym}}^2, t^0, s_X^0 \rangle$	1.46%	-0.001	0.007	0.000
					$\langle 2323 R^0, b^0, s_{\text{sym}}^1, s_{\text{asym}}^2, t^0, s_X^0 \rangle$	0.43%	0.000	0.002	0.000
					$\langle 2323 R^0, b^0, s_{\text{sym}}^1, s_{\text{asym}}^0, t^0, s_X^0 \rangle$	0.15%	0.001	-0.015	0.000
5341.9	0.058	0.000	-0.002	-0.000	$\langle 2325 R^5, b^0, s_{\text{sym}}^0, s_{\text{asym}}^0, t^0, s_X^0 \rangle$	35.98%	0.000	0.000	0.000
					$\langle 2325 R^2, b^0, s_{\text{sym}}^1, s_{\text{asym}}^0, t^0, s_X^0 \rangle$	0.69%	0.000	0.002	0.000
					$\langle 2325 R^0, b^0, s_{\text{sym}}^0, s_{\text{asym}}^2, t^0, s_X^0 \rangle$	0.48%	0.000	0.004	0.000
					$\langle 2325 R^0, b^0, s_{\text{sym}}^1, s_{\text{asym}}^0, t^0, s_X^0 \rangle$	0.08%	0.001	-0.010	0.000
5344.8	0.053	0.000	-0.002	-0.000	$\langle 2326 R^5, b^0, s_{\text{sym}}^0, s_{\text{asym}}^0, t^0, s_X^0 \rangle$	6.49%	0.000	0.000	0.000
					$\langle 2326 R^2, b^0, s_{\text{sym}}^1, s_{\text{asym}}^0, t^0, s_X^0 \rangle$	0.64%	0.000	0.002	0.000
					$\langle 2326 R^0, b^0, s_{\text{sym}}^0, s_{\text{asym}}^2, t^0, s_X^0 \rangle$	0.46%	0.000	0.004	0.000
					$\langle 2326 R^0, b^0, s_{\text{sym}}^1, s_{\text{asym}}^0, t^0, s_X^0 \rangle$	0.07%	0.001	-0.010	0.000
5347.4	0.122	-0.001	0.003	-0.000	$\langle 2327 R^1, b^1, s_{\text{sym}}^0, s_{\text{asym}}^1, t^0, s_X^0 \rangle$	4.53%	0.000	0.000	0.000

					$\langle 2327 R^2, b^0, s_{\text{sym}}^1, s_{\text{asym}}^0, t^0, s_X^0 \rangle$	1.91%	0.000	-0.003	0.000
					$\langle 2327 R^0, b^0, s_{\text{sym}}^0, s_{\text{asym}}^2, t^0, s_X^0 \rangle$	1.57%	0.001	-0.007	0.000
					$\langle 2327 R^0, b^0, s_{\text{sym}}^1, s_{\text{asym}}^0, t^0, s_X^0 \rangle$	0.23%	-0.002	0.018	0.000
5347.9	0.085	-0.000	0.000	0.003	$\langle 2328 R^2, b^0, s_{\text{sym}}^0, s_{\text{asym}}^1, t^1, s_X^0 \rangle$	33.80%	0.000	0.000	0.002
					$\langle 2328 R^3, b^1, s_{\text{sym}}^0, s_{\text{asym}}^0, t^1, s_X^0 \rangle$	14.36%	0.000	0.000	0.000
					$\langle 2328 R^2, b^0, s_{\text{sym}}^0, s_{\text{asym}}^1, t^0, s_X^0 \rangle$	2.63%	0.000	0.000	-0.005
					$\langle 2328 R^0, b^0, s_{\text{sym}}^1, s_{\text{asym}}^1, t^0, s_X^0 \rangle$	0.24%	0.000	0.000	-0.007
					$\langle 2328 R^0, b^0, s_{\text{sym}}^0, s_{\text{asym}}^1, t^0, s_X^0 \rangle$	0.09%	0.000	0.000	0.017
5379.1	0.055	0.000	-0.000	-0.002	$\langle 2360 R^2, b^0, s_{\text{sym}}^1, s_{\text{asym}}^0, t^2, s_X^0 \rangle$	25.63%	0.000	0.000	0.000
					$\langle 2360 R^2, b^0, s_{\text{sym}}^0, s_{\text{asym}}^1, t^0, s_X^0 \rangle$	0.17%	0.000	0.000	0.001
					$\langle 2360 R^0, b^0, s_{\text{sym}}^1, s_{\text{asym}}^1, t^0, s_X^0 \rangle$	0.09%	0.000	0.000	0.004
					$\langle 2360 R^0, b^0, s_{\text{sym}}^0, s_{\text{asym}}^1, t^0, s_X^0 \rangle$	0.02%	0.000	0.000	-0.009
5382.4	0.175	0.001	-0.004	-0.000	$\langle 2364 R^2, b^2, s_{\text{sym}}^0, s_{\text{asym}}^0, t^1, s_X^0 \rangle$	10.40%	0.000	0.000	0.000
					$\langle 2364 R^0, b^0, s_{\text{sym}}^0, s_{\text{asym}}^1, t^1, s_X^0 \rangle$	0.24%	0.000	0.000	0.000
					$\langle 2364 R^0, b^0, s_{\text{sym}}^1, s_{\text{asym}}^0, t^0, s_X^0 \rangle$	0.07%	0.001	-0.010	0.000
5387.8	0.123	0.001	-0.003	-0.000	$\langle 2374 R^2, b^0, s_{\text{sym}}^1, s_{\text{asym}}^0, t^2, s_X^0 \rangle$	28.24%	0.000	0.000	0.000
					$\langle 2374 R^0, b^0, s_{\text{sym}}^1, s_{\text{asym}}^2, t^0, s_X^0 \rangle$	0.31%	0.000	0.002	0.000
					$\langle 2374 R^0, b^0, s_{\text{sym}}^0, s_{\text{asym}}^2, t^0, s_X^0 \rangle$	0.25%	0.000	0.003	0.000
					$\langle 2374 R^0, b^0, s_{\text{sym}}^1, s_{\text{asym}}^0, t^0, s_X^0 \rangle$	0.05%	0.001	-0.009	0.000
5389.9	0.058	-0.000	0.002	0.000	$\langle 2376 R^2, b^0, s_{\text{sym}}^0, s_{\text{asym}}^1, t^3, s_X^0 \rangle$	27.02%	0.000	0.000	0.000
					$\langle 2376 R^0, b^0, s_{\text{sym}}^0, s_{\text{asym}}^2, t^0, s_X^0 \rangle$	0.15%	0.000	-0.002	0.000
					$\langle 2376 R^0, b^0, s_{\text{sym}}^1, s_{\text{asym}}^2, t^0, s_X^0 \rangle$	0.15%	0.000	-0.001	0.000
					$\langle 2376 R^0, b^0, s_{\text{sym}}^1, s_{\text{asym}}^0, t^0, s_X^0 \rangle$	0.03%	-0.001	0.006	0.000
5393.1	0.141	-0.001	0.003	0.000	$\langle 2383 R^2, b^0, s_{\text{sym}}^1, s_{\text{asym}}^0, t^0, s_X^0 \rangle$	13.36%	0.000	-0.001	0.000
					$\langle 2383 R^0, b^0, s_{\text{sym}}^1, s_{\text{asym}}^2, t^0, s_X^0 \rangle$	0.39%	0.000	-0.002	0.000
					$\langle 2383 R^0, b^0, s_{\text{sym}}^0, s_{\text{asym}}^2, t^0, s_X^0 \rangle$	0.38%	0.000	-0.003	0.000
					$\langle 2383 R^0, b^0, s_{\text{sym}}^1, s_{\text{asym}}^0, t^0, s_X^0 \rangle$	0.03%	-0.001	0.007	0.000
5403.6	0.403	0.000	-0.000	0.005	$\langle 2403 R^2, b^0, s_{\text{sym}}^0, s_{\text{asym}}^1, t^2, s_X^0 \rangle$	10.06%	0.000	0.000	0.000
					$\langle 2403 R^0, b^0, s_{\text{sym}}^1, s_{\text{asym}}^1, t^0, s_X^0 \rangle$	0.78%	0.000	0.000	-0.012
					$\langle 2403 R^0, b^0, s_{\text{sym}}^0, s_{\text{asym}}^1, t^0, s_X^0 \rangle$	0.20%	0.000	0.000	0.026
					$\langle 2403 R^0, b^0, s_{\text{sym}}^0, s_{\text{asym}}^1, t^1, s_X^0 \rangle$	0.10%	0.000	0.000	0.002
5404.2	0.256	-0.001	0.004	0.000	$\langle 2404 R^4, b^0, s_{\text{sym}}^0, s_{\text{asym}}^0, t^0, s_X^0 \rangle$	64.82%	0.000	0.000	0.000
					$\langle 2404 R^2, b^0, s_{\text{sym}}^1, s_{\text{asym}}^0, t^0, s_X^0 \rangle$	4.54%	0.000	-0.004	0.000
					$\langle 2404 R^0, b^0, s_{\text{sym}}^0, s_{\text{asym}}^2, t^0, s_X^0 \rangle$	1.06%	0.000	-0.006	0.000
					$\langle 2404 R^0, b^0, s_{\text{sym}}^1, s_{\text{asym}}^0, t^0, s_X^0 \rangle$	0.24%	-0.002	0.019	0.000
5417.3	0.887	0.000	-0.000	-0.008	$\langle 2416 R^2, b^2, s_{\text{sym}}^0, s_{\text{asym}}^0, t^0, s_X^0 \rangle$	13.70%	0.000	0.000	0.000
					$\langle 2416 R^1, b^1, s_{\text{sym}}^0, s_{\text{asym}}^1, t^0, s_X^0 \rangle$	11.58%	0.000	0.000	0.003
					$\langle 2416 R^0, b^0, s_{\text{sym}}^1, s_{\text{asym}}^1, t^0, s_X^0 \rangle$	2.62%	0.000	0.000	0.022
					$\langle 2416 R^0, b^0, s_{\text{sym}}^0, s_{\text{asym}}^1, t^0, s_X^0 \rangle$	0.56%	0.000	0.000	-0.043
					$\langle 2416 R^0, b^0, s_{\text{sym}}^1, s_{\text{asym}}^3, t^0, s_X^0 \rangle$	0.21%	0.000	0.000	0.003
5422.4	0.242	0.000	-0.000	-0.004	$\langle 2423 R^2, b^0, s_{\text{sym}}^0, s_{\text{asym}}^0, t^3, s_X^1 \rangle$	4.68%	0.000	0.000	0.000
					$\langle 2423 R^0, b^0, s_{\text{sym}}^1, s_{\text{asym}}^1, t^0, s_X^0 \rangle$	0.67%	0.000	0.000	0.011

					$\langle 2423 R^0, b^0, s_{\text{sym}}^0, s_{\text{asym}}^1, t^0, s_X^0 \rangle$	0.13%	0.000	0.000	-0.021
					$\langle 2423 R^0, b^0, s_{\text{sym}}^1, s_{\text{asym}}^3, t^0, s_X^0 \rangle$	0.06%	0.000	0.000	0.002
5422.9	4.333	-0.000	0.000	-0.018	$\langle 2425 R^0, b^0, s_{\text{sym}}^1, s_{\text{asym}}^1, t^0, s_X^0 \rangle$	12.15%	0.000	0.000	0.047
					$\langle 2425 R^0, b^0, s_{\text{sym}}^0, s_{\text{asym}}^1, t^0, s_X^0 \rangle$	2.46%	0.000	0.000	-0.090
					$\langle 2425 R^0, b^0, s_{\text{sym}}^1, s_{\text{asym}}^3, t^0, s_X^0 \rangle$	1.03%	0.000	0.000	0.007
5433.0	0.159	0.000	-0.000	-0.003	$\langle 2441 R^2, b^0, s_{\text{sym}}^0, s_{\text{asym}}^1, t^0, s_X^0 \rangle$	25.74%	0.000	0.000	0.009
					$\langle 2441 R^3, b^1, s_{\text{sym}}^0, s_{\text{asym}}^0, t^0, s_X^0 \rangle$	11.27%	0.000	0.000	0.000
					$\langle 2441 R^0, b^0, s_{\text{sym}}^1, s_{\text{asym}}^1, t^0, s_X^0 \rangle$	0.71%	0.000	0.000	0.011
					$\langle 2441 R^0, b^0, s_{\text{sym}}^0, s_{\text{asym}}^1, t^0, s_X^0 \rangle$	0.25%	0.000	0.000	-0.028
5438.2	0.122	0.000	-0.000	-0.003	$\langle 2451 R^2, b^0, s_{\text{sym}}^1, s_{\text{asym}}^0, t^1, s_X^0 \rangle$	11.50%	0.000	0.000	0.000
					$\langle 2451 R^3, b^1, s_{\text{sym}}^0, s_{\text{asym}}^0, t^2, s_X^0 \rangle$	10.10%	0.000	0.000	0.000
					$\langle 2451 R^2, b^2, s_{\text{sym}}^0, s_{\text{asym}}^0, t^0, s_X^0 \rangle$	5.62%	0.000	0.000	0.000
					$\langle 2451 R^0, b^0, s_{\text{sym}}^1, s_{\text{asym}}^1, t^0, s_X^0 \rangle$	0.59%	0.000	0.000	0.010
					$\langle 2451 R^2, b^0, s_{\text{sym}}^0, s_{\text{asym}}^1, t^0, s_X^0 \rangle$	0.49%	0.000	0.000	0.002
					$\langle 2451 R^0, b^0, s_{\text{sym}}^0, s_{\text{asym}}^1, t^0, s_X^0 \rangle$	0.13%	0.000	0.000	-0.021
5451.8	1.405	0.002	-0.010	-0.000	$\langle 2468 R^2, b^0, s_{\text{sym}}^1, s_{\text{asym}}^0, t^0, s_X^0 \rangle$	19.31%	0.000	0.002	0.000
					$\langle 2468 R^0, b^0, s_{\text{sym}}^0, s_{\text{asym}}^2, t^0, s_X^0 \rangle$	9.87%	-0.001	0.017	0.000
					$\langle 2468 R^0, b^0, s_{\text{sym}}^1, s_{\text{asym}}^2, t^0, s_X^0 \rangle$	4.82%	-0.001	0.007	0.000
					$\langle 2468 R^0, b^0, s_{\text{sym}}^1, s_{\text{asym}}^0, t^0, s_X^0 \rangle$	1.37%	0.004	-0.044	0.000
5453.1	0.059	0.000	-0.002	-0.000	$\langle 2469 R^2, b^0, s_{\text{sym}}^1, s_{\text{asym}}^0, t^3, s_X^0 \rangle$	14.12%	0.000	0.000	0.000
					$\langle 2469 R^0, b^0, s_{\text{sym}}^0, s_{\text{asym}}^2, t^0, s_X^0 \rangle$	0.43%	0.000	0.004	0.000
					$\langle 2469 R^0, b^0, s_{\text{sym}}^1, s_{\text{asym}}^2, t^0, s_X^0 \rangle$	0.21%	0.000	0.001	0.000
					$\langle 2469 R^0, b^0, s_{\text{sym}}^1, s_{\text{asym}}^0, t^0, s_X^0 \rangle$	0.05%	0.001	-0.009	0.000
5463.0	0.161	-0.000	-0.000	-0.003	$\langle 2478 R^3, b^1, s_{\text{sym}}^0, s_{\text{asym}}^0, t^2, s_X^0 \rangle$	10.69%	0.000	0.000	0.000
					$\langle 2478 R^0, b^0, s_{\text{sym}}^1, s_{\text{asym}}^1, t^0, s_X^0 \rangle$	0.59%	0.000	0.000	0.010
					$\langle 2478 R^2, b^0, s_{\text{sym}}^0, s_{\text{asym}}^1, t^0, s_X^0 \rangle$	0.41%	0.000	0.000	-0.002
					$\langle 2478 R^0, b^0, s_{\text{sym}}^0, s_{\text{asym}}^1, t^0, s_X^0 \rangle$	0.08%	0.000	0.000	-0.016
5517.1	0.190	-0.000	-0.000	-0.004	$\langle 2556 R^2, b^2, s_{\text{sym}}^0, s_{\text{asym}}^0, t^0, s_X^0 \rangle$	6.83%	0.000	0.000	0.000
					$\langle 2556 R^2, b^0, s_{\text{sym}}^1, s_{\text{asym}}^0, t^0, s_X^0 \rangle$	6.28%	0.000	0.000	0.000
					$\langle 2556 R^1, b^1, s_{\text{sym}}^0, s_{\text{asym}}^1, t^0, s_X^0 \rangle$	5.65%	0.000	0.000	0.002
					$\langle 2556 R^0, b^0, s_{\text{sym}}^1, s_{\text{asym}}^1, t^0, s_X^0 \rangle$	0.72%	0.000	0.000	0.011
					$\langle 2556 R^0, b^0, s_{\text{sym}}^0, s_{\text{asym}}^1, t^0, s_X^0 \rangle$	0.14%	0.000	0.000	-0.021
5518.6	1.112	0.000	-0.000	0.009	$\langle 2557 R^0, b^0, s_{\text{sym}}^1, s_{\text{asym}}^1, t^0, s_X^0 \rangle$	5.24%	0.000	0.000	-0.031
					$\langle 2557 R^0, b^0, s_{\text{sym}}^0, s_{\text{asym}}^1, t^0, s_X^0 \rangle$	0.63%	0.000	0.000	0.046
					$\langle 2557 R^0, b^0, s_{\text{sym}}^1, s_{\text{asym}}^3, t^0, s_X^0 \rangle$	0.30%	0.000	0.000	-0.004
5527.0	0.069	0.000	0.000	0.002	$\langle 2575 R^2, b^2, s_{\text{sym}}^0, s_{\text{asym}}^0, t^0, s_X^0 \rangle$	7.71%	0.000	0.000	0.000
					$\langle 2575 R^1, b^1, s_{\text{sym}}^0, s_{\text{asym}}^1, t^0, s_X^0 \rangle$	6.08%	0.000	0.000	-0.002
					$\langle 2575 R^2, b^0, s_{\text{sym}}^1, s_{\text{asym}}^0, t^0, s_X^0 \rangle$	5.19%	0.000	0.000	0.000
					$\langle 2575 R^0, b^0, s_{\text{sym}}^1, s_{\text{asym}}^1, t^0, s_X^0 \rangle$	0.27%	0.000	0.000	-0.007
					$\langle 2575 R^0, b^0, s_{\text{sym}}^0, s_{\text{asym}}^1, t^0, s_X^0 \rangle$	0.06%	0.000	0.000	0.014
5565.8	0.177	-0.000	0.000	-0.004	$\langle 2624 R^2, b^0, s_{\text{sym}}^0, s_{\text{asym}}^1, t^0, s_X^0 \rangle$	16.66%	0.000	0.000	-0.003
					$\langle 2624 R^3, b^1, s_{\text{sym}}^0, s_{\text{asym}}^0, t^0, s_X^0 \rangle$	15.19%	0.000	0.000	0.000

					$\langle 2624 R^0, b^0, s_{\text{sym}}^1, s_{\text{asym}}^1, t^0, s_X^0 \rangle$	0.49%	0.000	0.000	0.009
					$\langle 2624 R^0, b^0, s_{\text{sym}}^0, s_{\text{asym}}^1, t^0, s_X^0 \rangle$	0.06%	0.000	0.000	-0.014
5585.7	0.176	0.000	-0.000	-0.004	$\langle 2664 R^3, b^0, s_{\text{sym}}^0, s_{\text{asym}}^1, t^0, s_X^0 \rangle$	22.20%	0.000	0.000	-0.002
					$\langle 2664 R^4, b^1, s_{\text{sym}}^0, s_{\text{asym}}^0, t^0, s_X^0 \rangle$	18.06%	0.000	0.000	0.000
					$\langle 2664 R^2, b^2, s_{\text{sym}}^0, s_{\text{asym}}^0, t^0, s_X^0 \rangle$	7.76%	0.000	0.000	0.000
					$\langle 2664 R^2, b^0, s_{\text{sym}}^0, s_{\text{asym}}^1, t^0, s_X^0 \rangle$	1.53%	0.000	0.000	0.003
					$\langle 2664 R^0, b^0, s_{\text{sym}}^1, s_{\text{asym}}^1, t^0, s_X^0 \rangle$	0.40%	0.000	0.000	0.009
					$\langle 2664 R^0, b^0, s_{\text{sym}}^0, s_{\text{asym}}^1, t^0, s_X^0 \rangle$	0.05%	0.000	0.000	-0.013
5610.2	0.090	-0.000	0.003	0.000	$\langle 2704 R^2, b^2, s_{\text{sym}}^0, s_{\text{asym}}^0, t^0, s_X^0 \rangle$	19.44%	0.000	0.000	0.000
					$\langle 2704 R^1, b^1, s_{\text{sym}}^0, s_{\text{asym}}^1, t^0, s_X^0 \rangle$	11.20%	0.000	0.000	0.000
					$\langle 2704 R^0, b^0, s_{\text{sym}}^0, s_{\text{asym}}^1, t^1, s_X^0 \rangle$	1.00%	0.000	0.002	0.000
					$\langle 2704 R^0, b^0, s_{\text{sym}}^0, s_{\text{asym}}^2, t^0, s_X^0 \rangle$	0.95%	0.000	0.005	0.000
5634.6	0.055	0.000	-0.002	-0.000	$\langle 2744 R^0, b^3, s_{\text{sym}}^0, s_{\text{asym}}^0, t^4, s_X^0 \rangle$	4.33%	0.000	0.000	0.000
					$\langle 2744 R^0, b^0, s_{\text{sym}}^0, s_{\text{asym}}^2, t^0, s_X^0 \rangle$	0.28%	0.000	0.003	0.000
					$\langle 2744 R^0, b^0, s_{\text{sym}}^0, s_{\text{asym}}^1, t^1, s_X^0 \rangle$	0.15%	0.000	0.001	0.002
					$\langle 2744 R^0, b^0, s_{\text{sym}}^1, s_{\text{asym}}^0, t^0, s_X^0 \rangle$	0.03%	0.001	-0.006	0.000
5636.3	0.056	0.000	-0.002	-0.000	$\langle 2746 R^2, b^0, s_{\text{sym}}^1, s_{\text{asym}}^0, t^4, s_X^0 \rangle$	8.30%	0.000	0.000	0.000
					$\langle 2746 R^0, b^0, s_{\text{sym}}^0, s_{\text{asym}}^2, t^1, s_X^0 \rangle$	1.23%	0.000	0.001	0.002
					$\langle 2746 R^0, b^0, s_{\text{sym}}^0, s_{\text{asym}}^2, t^0, s_X^0 \rangle$	0.35%	0.000	0.003	0.000
					$\langle 2746 R^0, b^0, s_{\text{sym}}^1, s_{\text{asym}}^0, t^0, s_X^0 \rangle$	0.03%	0.001	-0.007	0.000
5663.0	0.123	0.000	-0.000	-0.003	$\langle 2787 R^1, b^1, s_{\text{sym}}^1, s_{\text{asym}}^0, t^0, s_X^0 \rangle$	28.32%	0.000	0.000	0.001
					$\langle 2787 R^0, b^0, s_{\text{sym}}^0, s_{\text{asym}}^1, t^1, s_X^0 \rangle$	1.00%	0.000	0.000	-0.008
					$\langle 2787 R^0, b^0, s_{\text{sym}}^1, s_{\text{asym}}^1, t^0, s_X^0 \rangle$	0.17%	0.000	0.000	-0.006
5692.4	0.057	0.001	-0.002	0.000	$\langle 2831 R^2, b^0, s_{\text{sym}}^0, s_{\text{asym}}^1, t^2, s_X^0 \rangle$	10.94%	0.000	0.000	0.000
					$\langle 2831 R^0, b^0, s_{\text{sym}}^0, s_{\text{asym}}^2, t^0, s_X^0 \rangle$	1.30%	-0.001	0.006	0.000
					$\langle 2831 R^0, b^0, s_{\text{sym}}^1, s_{\text{asym}}^2, t^0, s_X^0 \rangle$	0.52%	0.000	0.002	0.000
					$\langle 2831 R^0, b^0, s_{\text{sym}}^1, s_{\text{asym}}^0, t^0, s_X^0 \rangle$	0.08%	0.001	-0.011	0.000
5695.3	0.135	0.001	-0.003	-0.000	$\langle 2839 R^0, b^0, s_{\text{sym}}^0, s_{\text{asym}}^2, t^0, s_X^0 \rangle$	3.19%	-0.001	0.010	0.000
					$\langle 2839 R^0, b^0, s_{\text{sym}}^1, s_{\text{asym}}^2, t^0, s_X^0 \rangle$	1.24%	-0.001	0.003	0.000
					$\langle 2839 R^0, b^0, s_{\text{sym}}^1, s_{\text{asym}}^0, t^0, s_X^0 \rangle$	0.19%	0.002	-0.017	0.000
5697.1	0.483	-0.000	0.000	0.006	$\langle 2841 R^0, b^0, s_{\text{sym}}^1, s_{\text{asym}}^1, t^0, s_X^0 \rangle$	3.29%	0.000	0.000	-0.024
					$\langle 2841 R^0, b^0, s_{\text{sym}}^0, s_{\text{asym}}^1, t^0, s_X^0 \rangle$	0.35%	0.000	0.000	0.034
					$\langle 2841 R^0, b^0, s_{\text{sym}}^1, s_{\text{asym}}^3, t^0, s_X^0 \rangle$	0.17%	0.000	0.000	-0.003
5698.0	0.186	-0.000	-0.000	-0.004	$\langle 2843 R^2, b^0, s_{\text{sym}}^1, s_{\text{asym}}^0, t^3, s_X^0 \rangle$	24.60%	0.000	0.000	0.000
					$\langle 2843 R^0, b^0, s_{\text{sym}}^1, s_{\text{asym}}^1, t^0, s_X^0 \rangle$	1.52%	0.000	0.000	0.017
					$\langle 2843 R^0, b^0, s_{\text{sym}}^0, s_{\text{asym}}^1, t^0, s_X^0 \rangle$	0.13%	0.000	0.000	-0.021
					$\langle 2843 R^0, b^0, s_{\text{sym}}^1, s_{\text{asym}}^3, t^0, s_X^0 \rangle$	0.07%	0.000	0.000	0.002
5699.9	0.286	0.000	-0.000	0.004	$\langle 2844 R^4, b^0, s_{\text{sym}}^0, s_{\text{asym}}^0, t^3, s_X^0 \rangle$	2.54%	0.000	0.000	0.000
					$\langle 2844 R^0, b^0, s_{\text{sym}}^1, s_{\text{asym}}^1, t^0, s_X^0 \rangle$	2.09%	0.000	0.000	-0.019
					$\langle 2844 R^0, b^0, s_{\text{sym}}^0, s_{\text{asym}}^2, t^1, s_X^0 \rangle$	1.14%	0.000	0.001	0.002
					$\langle 2844 R^0, b^0, s_{\text{sym}}^0, s_{\text{asym}}^1, t^0, s_X^0 \rangle$	0.19%	0.000	0.000	0.025
5701.5	0.068	0.000	-0.000	0.002	$\langle 2847 R^2, b^0, s_{\text{sym}}^1, s_{\text{asym}}^0, t^1, s_X^0 \rangle$	12.42%	0.000	0.000	0.000

					$\langle 2847 R^1, b^1, s_{\text{sym}}^0, s_{\text{asym}}^1, t^0, s_X^0 \rangle$	1.48%	0.000	0.000	-0.001
					$\langle 2847 R^0, b^0, s_{\text{sym}}^1, s_{\text{asym}}^1, t^0, s_X^0 \rangle$	0.46%	0.000	0.000	-0.009
					$\langle 2847 R^0, b^0, s_{\text{sym}}^0, s_{\text{asym}}^1, t^0, s_X^0 \rangle$	0.06%	0.000	0.000	0.014
5706.7	0.141	-0.000	0.000	0.003	$\langle 2854 R^2, b^0, s_{\text{sym}}^0, s_{\text{asym}}^1, t^2, s_X^0 \rangle$	4.17%	0.000	0.000	0.000
					$\langle 2854 R^0, b^0, s_{\text{sym}}^1, s_{\text{asym}}^1, t^0, s_X^0 \rangle$	1.21%	0.000	0.000	-0.015
					$\langle 2854 R^0, b^0, s_{\text{sym}}^0, s_{\text{asym}}^2, t^1, s_X^0 \rangle$	0.46%	0.000	0.001	0.001
					$\langle 2854 R^0, b^0, s_{\text{sym}}^0, s_{\text{asym}}^1, t^0, s_X^0 \rangle$	0.11%	0.000	0.000	0.019
5752.0	0.056	-0.000	0.000	-0.002	$\langle 2934 R^3, b^1, s_{\text{sym}}^0, s_{\text{asym}}^0, t^3, s_X^0 \rangle$	2.43%	0.000	0.000	0.000
					$\langle 2934 R^0, b^0, s_{\text{sym}}^1, s_{\text{asym}}^1, t^1, s_X^0 \rangle$	0.86%	0.000	-0.001	-0.002
					$\langle 2934 R^0, b^0, s_{\text{sym}}^1, s_{\text{asym}}^1, t^0, s_X^0 \rangle$	0.66%	0.000	0.000	0.011
					$\langle 2934 R^0, b^0, s_{\text{sym}}^0, s_{\text{asym}}^1, t^0, s_X^0 \rangle$	0.07%	0.000	0.000	-0.015
5773.0	0.074	-0.000	0.000	-0.002	$\langle 2966 R^2, b^2, s_{\text{sym}}^0, s_{\text{asym}}^0, t^2, s_X^0 \rangle$	3.42%	0.000	0.000	0.000
					$\langle 2966 R^0, b^0, s_{\text{sym}}^1, s_{\text{asym}}^1, t^0, s_X^0 \rangle$	0.79%	0.000	0.000	0.012
					$\langle 2966 R^0, b^0, s_{\text{sym}}^1, s_{\text{asym}}^1, t^1, s_X^0 \rangle$	0.56%	0.000	-0.001	-0.001
					$\langle 2966 R^0, b^0, s_{\text{sym}}^0, s_{\text{asym}}^1, t^0, s_X^0 \rangle$	0.08%	0.000	0.000	-0.016
5793.0	0.089	0.000	-0.000	0.002	$\langle 2994 R^2, b^2, s_{\text{sym}}^0, s_{\text{asym}}^0, t^1, s_X^0 \rangle$	3.12%	0.000	0.000	0.000
					$\langle 2994 R^0, b^0, s_{\text{sym}}^1, s_{\text{asym}}^1, t^0, s_X^0 \rangle$	1.15%	0.000	0.000	-0.014
					$\langle 2994 R^0, b^0, s_{\text{sym}}^0, s_{\text{asym}}^1, t^0, s_X^0 \rangle$	0.11%	0.000	0.000	0.019
					$\langle 2994 R^0, b^0, s_{\text{sym}}^1, s_{\text{asym}}^3, t^0, s_X^0 \rangle$	0.04%	0.000	0.000	-0.001
5824.5	0.087	-0.000	0.002	0.000	$\langle 3056 R^2, b^2, s_{\text{sym}}^0, s_{\text{asym}}^0, t^3, s_X^0 \rangle$	11.24%	0.000	0.000	0.000
					$\langle 3056 R^0, b^0, s_{\text{sym}}^2, s_{\text{asym}}^0, t^0, s_X^0 \rangle$	3.35%	0.000	-0.001	0.000
					$\langle 3056 R^0, b^0, s_{\text{sym}}^0, s_{\text{asym}}^2, t^0, s_X^0 \rangle$	0.39%	0.000	0.003	0.000
					$\langle 3056 R^0, b^0, s_{\text{sym}}^1, s_{\text{asym}}^0, t^0, s_X^0 \rangle$	0.01%	0.000	0.003	0.000
5827.8	0.061	-0.000	0.002	0.000	$\langle 3064 R^4, b^1, s_{\text{sym}}^0, s_{\text{asym}}^0, t^1, s_X^0 \rangle$	4.28%	0.000	0.000	0.000
					$\langle 3064 R^0, b^0, s_{\text{sym}}^2, s_{\text{asym}}^0, t^0, s_X^0 \rangle$	2.32%	0.000	-0.001	0.000
					$\langle 3064 R^0, b^0, s_{\text{sym}}^0, s_{\text{asym}}^2, t^0, s_X^0 \rangle$	0.17%	0.000	0.002	0.000
					$\langle 3064 R^0, b^0, s_{\text{sym}}^1, s_{\text{asym}}^0, t^0, s_X^0 \rangle$	0.01%	0.000	0.003	0.000
5848.2	0.139	0.001	-0.003	0.000	$\langle 3098 R^1, b^1, s_{\text{sym}}^1, s_{\text{asym}}^0, t^1, s_X^0 \rangle$	16.38%	0.000	0.000	0.000
					$\langle 3098 R^0, b^0, s_{\text{sym}}^2, s_{\text{asym}}^0, t^0, s_X^0 \rangle$	4.75%	0.000	0.002	0.000
					$\langle 3098 R^0, b^0, s_{\text{sym}}^0, s_{\text{asym}}^2, t^0, s_X^0 \rangle$	0.13%	0.000	-0.002	0.000
					$\langle 3098 R^0, b^0, s_{\text{sym}}^1, s_{\text{asym}}^0, t^0, s_X^0 \rangle$	0.02%	0.000	-0.005	0.000
5879.3	0.068	-0.000	0.000	-0.002	$\langle 3166 R^1, b^1, s_{\text{sym}}^0, s_{\text{asym}}^1, t^1, s_X^0 \rangle$	2.20%	0.000	0.000	0.000
					$\langle 3166 R^2, b^0, s_{\text{sym}}^0, s_{\text{asym}}^1, t^0, s_X^0 \rangle$	0.51%	0.000	0.000	-0.002
					$\langle 3166 R^0, b^0, s_{\text{sym}}^1, s_{\text{asym}}^1, t^0, s_X^0 \rangle$	0.22%	0.000	0.000	0.006
					$\langle 3166 R^0, b^0, s_{\text{sym}}^0, s_{\text{asym}}^1, t^0, s_X^0 \rangle$	0.04%	0.000	0.000	-0.011
6002.1	0.094	0.000	-0.000	-0.003	$\langle 3400 R^1, b^1, s_{\text{sym}}^1, s_{\text{asym}}^0, t^0, s_X^0 \rangle$	3.75%	0.000	0.000	0.000
					$\langle 3400 R^0, b^0, s_{\text{sym}}^2, s_{\text{asym}}^0, t^1, s_X^0 \rangle$	3.63%	0.000	-0.001	-0.001
					$\langle 3400 R^0, b^0, s_{\text{sym}}^1, s_{\text{asym}}^1, t^0, s_X^0 \rangle$	0.23%	0.000	0.000	0.006
					$\langle 3400 R^0, b^0, s_{\text{sym}}^0, s_{\text{asym}}^1, t^0, s_X^0 \rangle$	0.05%	0.000	0.000	-0.013
6175.4	0.061	0.000	-0.002	0.000	$\langle 3766 R^0, b^2, s_{\text{sym}}^1, s_{\text{asym}}^0, t^0, s_X^0 \rangle$	43.83%	0.000	0.005	0.000
					$\langle 3766 R^2, b^2, s_{\text{sym}}^0, s_{\text{asym}}^0, t^0, s_X^0 \rangle$	5.14%	0.000	0.000	0.000
					$\langle 3766 R^0, b^0, s_{\text{sym}}^0, s_{\text{asym}}^2, t^0, s_X^0 \rangle$	0.28%	0.000	-0.003	0.000

$$\langle 3766 | R^0, b^0, s_{\text{sym}}^1, s_{\text{asym}}^0, t^0, s_X^0 \rangle \quad 0.02\% \quad 0.000 \quad -0.005 \quad 0.000$$