

Emergent quasiparticles in Euclidean tiling

F. Crasto de Lima^{1,*} and A. Fazzio^{1,†}

¹*Brazilian Nanotechnology National Laboratory CNPEM,
C.P. 6192, 13083-970, Campinas, SP, Brazil*

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Abstract

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$k = 7$ LATTICES

t7u001

Tiling reference number t7u001 with space-group ' Pm' ' (6) and 56 sites in the unit cell, with vertex type indicated in Tab. S1. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S1.

TABLE S1. Tiling t7u001 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
2	12	6	0	0	0	1	0	0	6	12	0	0	11	6

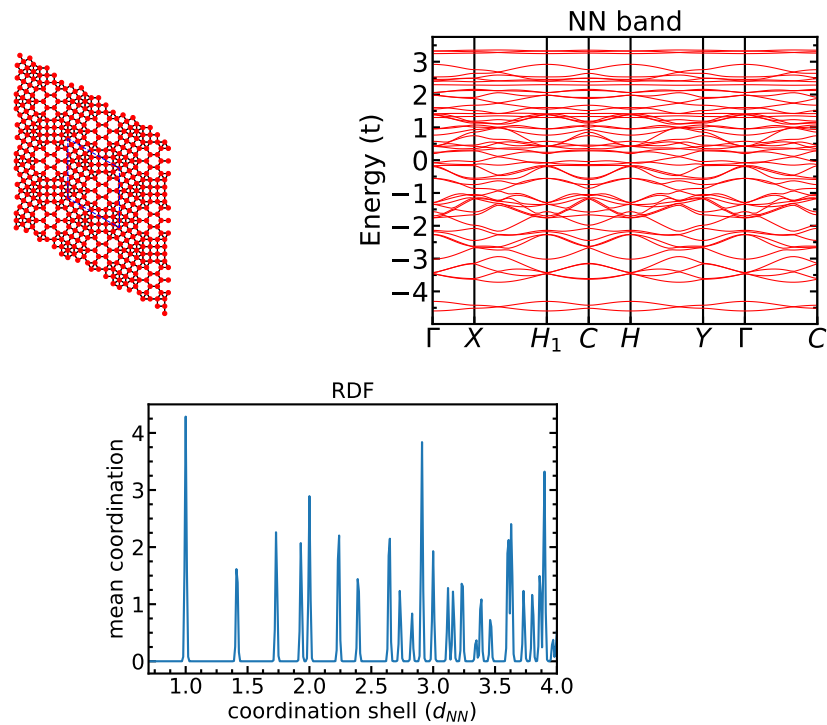


FIG. S1. t7u001 lattice framework, nearest neighbors band structure and radial distribution function.

t7u002

Tiling reference number t7u002 with space-group ' Pm' ' (6) and 39 sites in the unit cell, with vertex type indicated in Tab. S2. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S2.

TABLE S2. Tiling t7u002 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
3	0	0	0	6	0	0	0	6	6	6	6	0	6	0

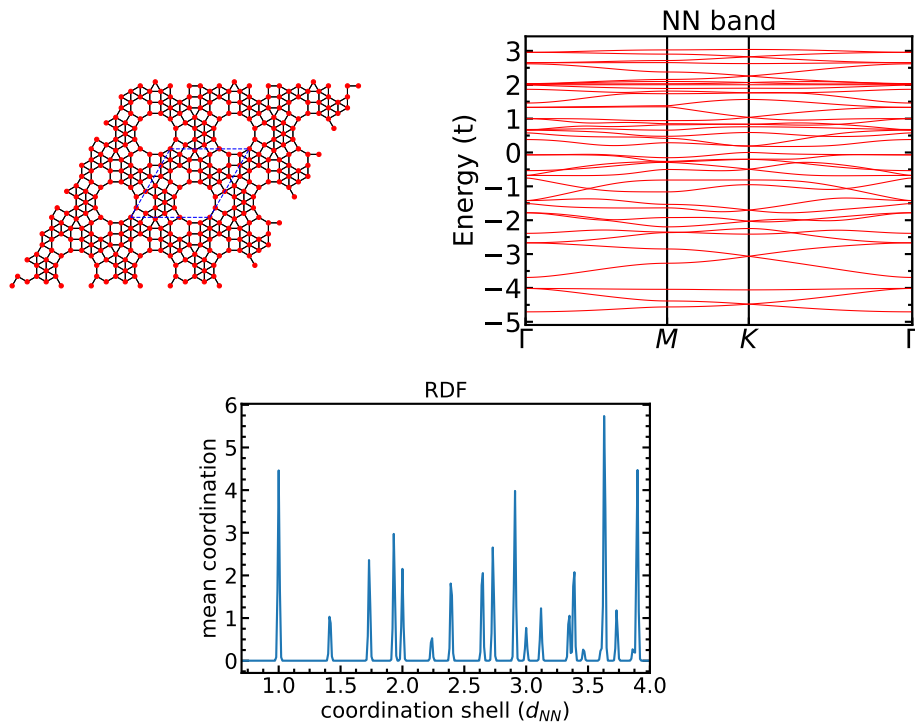


FIG. S2. t7u002 lattice framework, nearest neighbors band structure and radial distribution function.

t7u003

Tiling reference number t7u003 with space-group ' Pm' ' (6) and 24 sites in the unit cell, with vertex type indicated in Tab. S3. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S3.

TABLE S3. Tiling t7u003 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
0	0	0	0	4	0	0	0	0	2	4	4	4	4	2

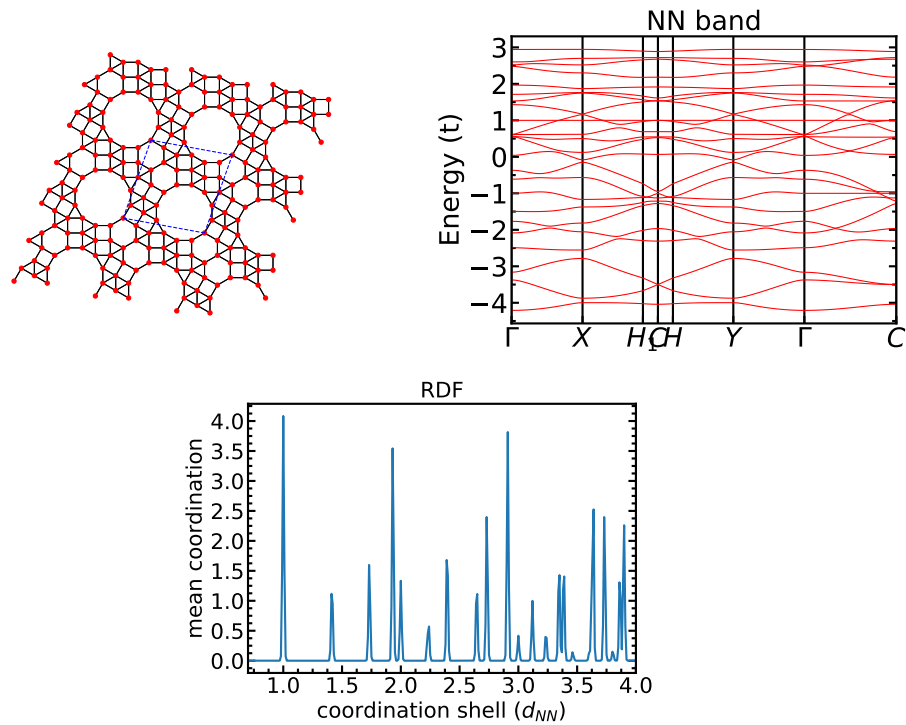


FIG. S3. t7u003 lattice framework, nearest neighbors band structure and radial distribution function.

t7u004

Tiling reference number t7u004 with space-group ' $Amm2'$ ' (38) and 43 sites in the unit cell, with vertex type indicated in Tab. S4. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S4.

TABLE S4. Tiling t7u004 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
1	6	0	0	0	0	6	6	6	0	6	0	0	12	0

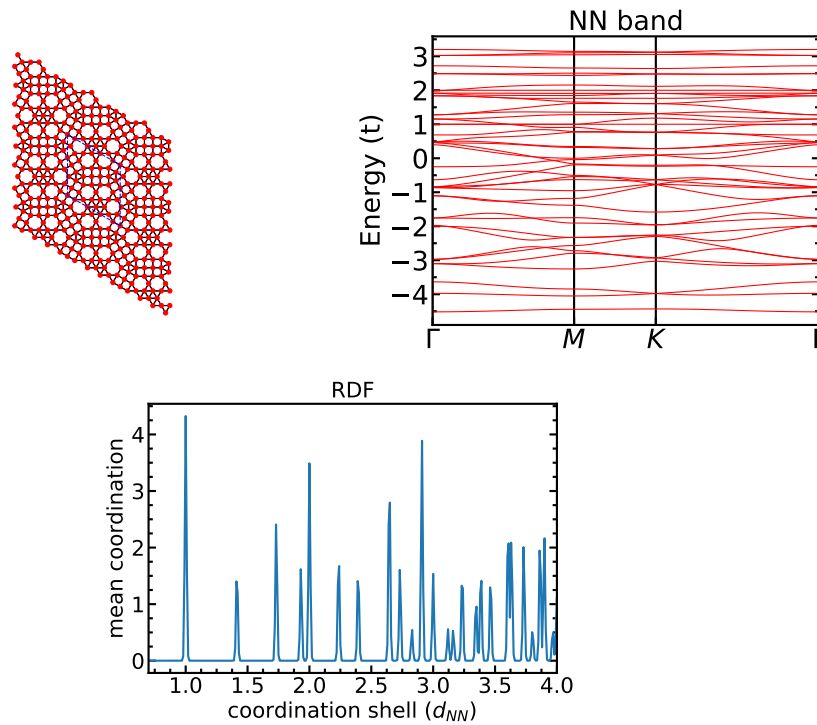


FIG. S4. t7u004 lattice framework, nearest neighbors band structure and radial distribution function.

t7u005

Tiling reference number t7u005 with space-group ' Pm' ' (6) and 66 sites in the unit cell, with vertex type indicated in Tab. S5. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S5.

TABLE S5. Tiling t7u005 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
6	0	0	0	0	0	7	6	12	14	10	0	0	11	0

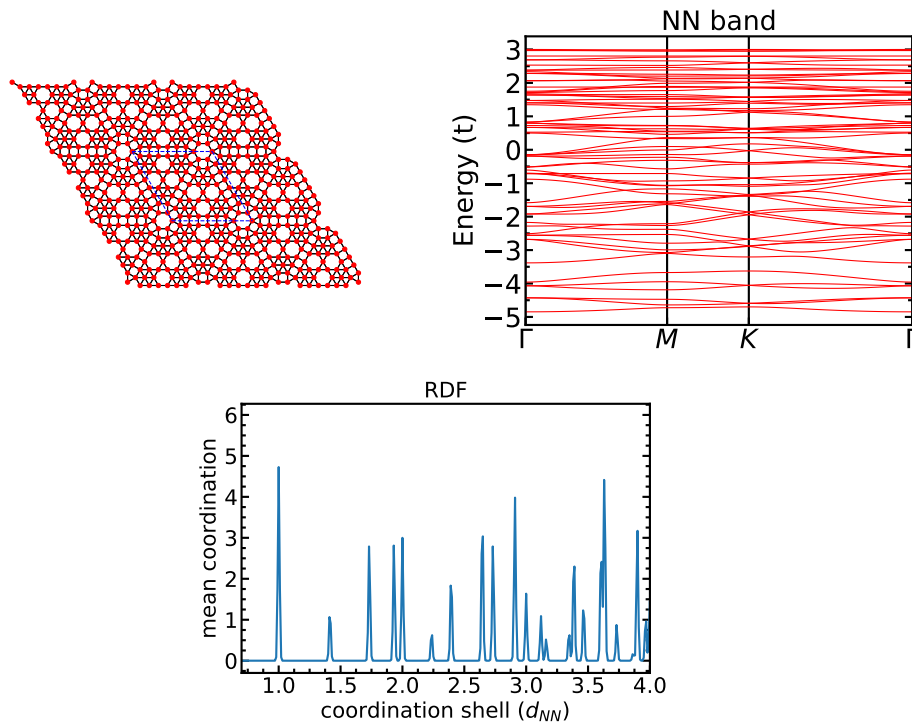


FIG. S5. t7u005 lattice framework, nearest neighbors band structure and radial distribution function.

t7u006

Tiling reference number t7u006 with space-group ' Pm' ' (6) and 63 sites in the unit cell, with vertex type indicated in Tab. S6. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S6.

TABLE S6. Tiling t7u006 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
6	0	0	0	0	0	6	3	12	0	12	12	0	12	0

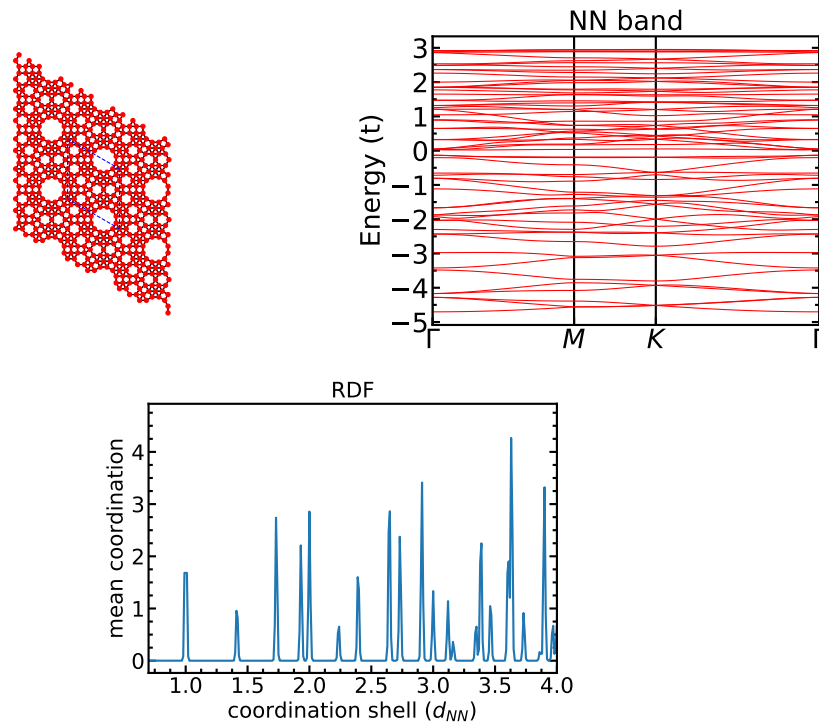


FIG. S6. t7u006 lattice framework, nearest neighbors band structure and radial distribution function.

t7u007

Tiling reference number t7u007 with space-group ' Pm' ' (6) and 21 sites in the unit cell, with vertex type indicated in Tab. S7. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S7.

TABLE S7. Tiling t7u007 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
2	0	0	0	0	0	2	1	4	4	4	0	0	4	0

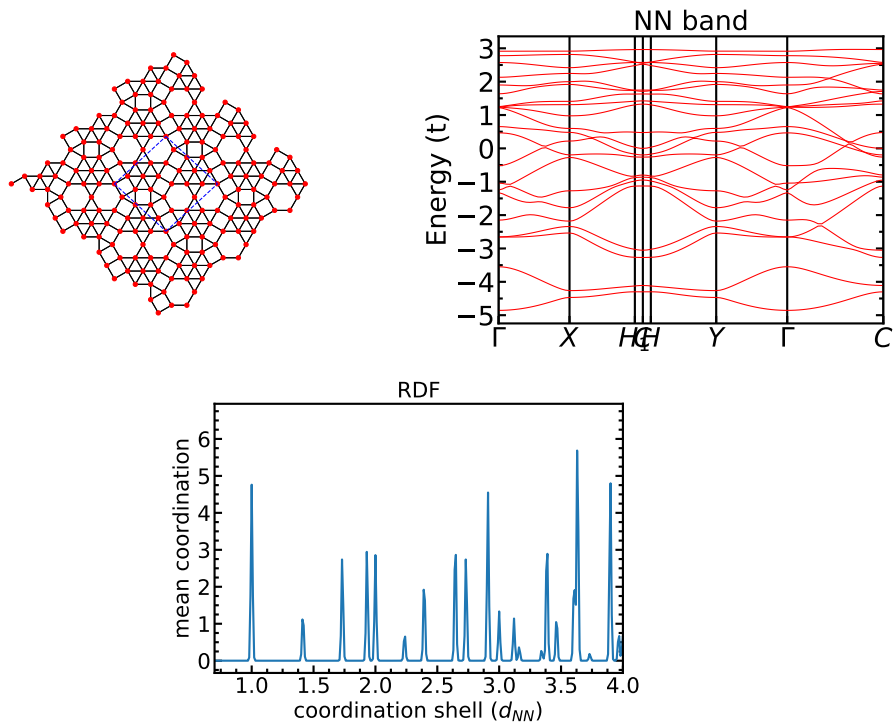


FIG. S7. t7u007 lattice framework, nearest neighbors band structure and radial distribution function.

* felipe.lima@lnnano.cnpem.br

† adalberto.fazzio@lnnano.cnpem.br