

Supporting Information: Lithium ions solvated in helium

M. Rastogi^a, C. Leidlmaier^a, L. An der Lan^a, J. Ortiz de Zárate^b, R. Pérez de Tudela^c, M. Bartolomei^b, M. I. Hernández^b, J. Campos-Martínez^b, T. González-Lezana^{b*}, J. Hernández-Rojas^d, J. Bretón^d, P. Scheier^a, and M. Gatchell^{a,e*}

^aInstitut für Ionenphysik und Angewandte Physik, Universität Innsbruck,
Technikerstr. 25, A-6020 Innsbruck, Austria

^bInstituto de Física Fundamental, IFF-CSIC, Serrano 123, 28006 Madrid, Spain

^cLehrstuhl für Theoretische Chemie, Ruhr-Universität Bochum, 44780 Bochum,
Germany

^dDepartamento de Física and IUDEA, Universidad de La Laguna, 38205 Tenerife, Spain

^eDepartment of Physics, Stockholm University, 106 91 Stockholm, Sweden

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*t.gonzalez.lezana@csic.es
*michael.gatchell@uibk.ac.at

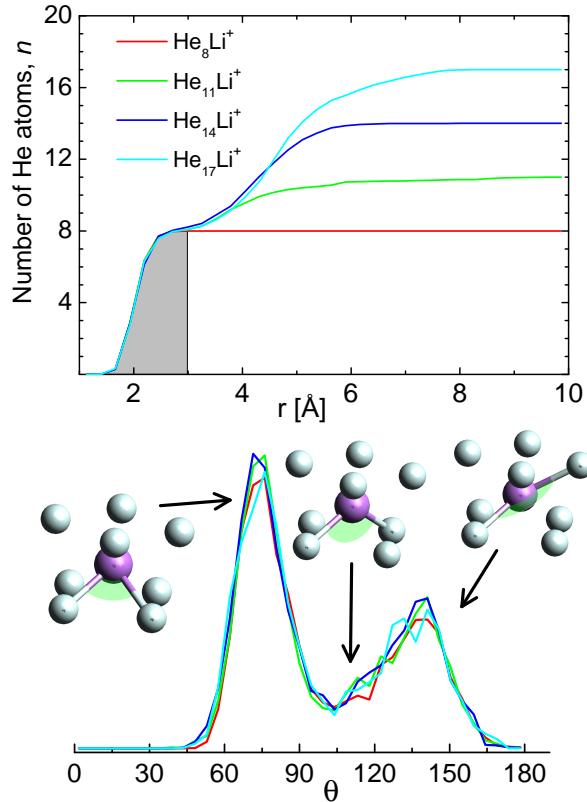


Figure 1: (top) Number of He atoms inside a sphere of radius r around the Li^+ ion in He_nLi^+ droplets with $n = 8, 11, 14$ and 17 . The first solvation layer around the ionic impurity is formed by 8 He atoms as shown in the above panel with all distributions sharing the area in shadow covering up to $r \sim 3 \text{ \AA}$. Further confirmation is observed in the angular distribution in the bottom panel where the same pattern with the three features for the corresponding $\text{He}-\text{Li}^+-\text{He}$ angles in the He_2-Li^+ clusters is found for the $n = 11, 14$ and 17 cases.