



SEMIL

5th November 2015 - 10:00

Building 99, Seminar Room I+II (EG)

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Experiments with molecular ions at MPIK: From Coulomb explosion of chiral molecules to the formation of water in space

More than 180 molecules have been identified in interstellar environments, and - owing to modern telescope developments - this number continues to grow rapidly. The exploration of the molecular composition of the universe is intertwined with questions like the origin of Earth's water and the origin of life. To gain true understanding of those questions models of astronomical environments need reliable input that can only come from laboratory experiments.

In the first part of my talk I will give a brief overview of experiments with fundamental molecular ions carried out at the Max Planck Institute for Nuclear Physics (Heidelberg). In the second part I will describe the Cryogenic Storage Ring (CSR) project and experimental developments that aim to shed light on the formation and destruction of molecules under interstellar conditions.



The Cryogenic Storage Ring (CSR) at the Max-Planck-Institut für Kernphysik in Heidelberg.

Host: Melanie Schnell - CFEL Molecular Physics seminar