HITRAP Facility and Experiments - Status and Future Perspectives



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CRYRIMS - The COLTRIMS-Reaction-microscope for CRYRING

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With its roots in collision physics, back in the late 1980, COLTRIMS-setups (COLd Target Recoil Ion Momentum Spectroscopy) or Reaction microscopes, as they are also termed, are widely used in modern AMO-physics. Technically they consist of a super sonic gas jet, the imaging spectrometer and position and time-sensitive detectors. The super sonic gas jet provides the target, covering basically everything that can be brought into the gas phase. Gas jet and ionizing radition, here the CRYRING-beam, are crossed at right angle. Charegd particles (electrons and ions), which are set free in the interaction are projected with weak elektric and magnetic fields onto position and time-sensitive detectors, allowing the determination of each particle's momentum in coindice with the others. Here we report on the planned versatile setup, that will be part of the CRYRING Instruments.

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