GSI - FAIR Colloquium

Main Lecture Hall (SB1 1.120), 64291 Darmstadt, Planckstraße 1

Tuesday, July 05, 2016,
16:15 Uhr (Tee ab 15:45)

- *Dr. Daniel Severin (GSI, Darmstadt),*
- *Jan Glorius (GSI, Darmstadt),*
- *Dr. Pierre-Michel Hillenbrand (GSI, Darmstadt)*

Report from the GSI beam time 2016

2016 beam time at GSI: an overview *(Daniel Severin)*

Proton-capture studies at ESR using stored low-energy ions *(Jan Glorius)*
To detect (p,gamma) reaction products at the lowest possible energies storable in the ESR, ultra-high vacuum grade silicon detectors have been successfully put to operation during the latest 124Xe beam time. A brief introduction into the astrophysical motivation and an extended presentation of the preliminary results of the experiment performed at energies around 6 MeV/u will be given.

Latest developments of SPARC detectors at the ESR *(Pierre-Michel Hillenbrand)*
Aiming to enhance the sensitivity to both structural and dynamical aspects of atomic physics, new detectors have been developed within the SPARC collaboration. During the last beam time at the ESR, they were applied to observe collision of Li-like uranium ions with gaseous targets of N2 and Xe. Improved resolution in the spectroscopy of the U89+ projectiles was achieved by using novel low-temperature micro-calorimeters. In addition, double-differential cross sections of projectile ionization were studied using the magnetic forward-angle electron spectrometer. Preliminary results will be presented.

Einladende: Silvia Masciocchi

GSI Helmholtzzentrum für Schwerionenforschung GmbH