

GSI - FAIR Colloquium

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

*Tuesday, May 03, 2016,
16:15 Uhr (Tee ab 15:45)*

Pre-colloquium for students at 15:30

Klaus Blaum

Director at the Max-Planck-Institut für Kernphysik, Heidelberg

Fundamental tests of nature with cooled and stored exotic ions

The presentation will concentrate on recent applications with exciting results of Penning traps in atomic and nuclear physics with cooled and stored exotic ions. These are high-accuracy mass measurements of short-lived radionuclides, g-factor determinations of the bound-electron in highly-charged, hydrogen-like ions and g-factor measurements of the proton and antiproton. The experiments are dedicated to nuclear-, neutrino- and astrophysics studies in the case of mass measurements on radionuclides, and to the determination of fundamental constants and a CPT test using g-factor measurements.

Einladende: Silvia Masciocchi

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