

## Physikalisches Kolloquium



Thursday, 07.12.2017, 17:15, HS 100 Reception with coffee & cookies 16:45

(For university staff: please bring your own cup for sustainability reasons)

Prof. Dr. Klaus Blaum, MPI for Nuclear Physics, Heidelberg:

## Measuring the World – Precision Measurements of Fundamental Properties of Atoms and Nuclei

## **Abstract**

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.



All of you interested in physics are cordially invited!