

INSTITUT FÜR ISOTOPENFORSCHUNG UND KERNPHYSIK
DER UNIVERSITÄT WIEN

E I N L A D U N G

zum

I N S T I T U T S S E M I N A R

von

Johann Zmeskal

Institut für Mittelenergiephysik der
Österreichische Akademie der Wissenschaften Wien

PIXE Application in Exotic Atom Research

Our PIXE apparatus presently installed at VERA is used as a very effective analytical tool for materials used in experiments in exotic atom research. Exotic atoms, in particular Kaonic and Pionic Hydrogen, are of major interest in low energy QCD. They allow the determination of scattering lengths in the Kaon-Nucleon and Pion-Nucleon systems with unprecedented precision and thereby provide experimental evidence for chiral dynamics. As will be shown in this talk, the aimed for precision requires precise knowledge of the contamination in the materials used in the experimental set-up.

A brief introduction to exotic atom experiments of our institute and an account of the first PIXE measurements at VERA will be given.

Donnerstag, 22. Juli 2004, 16:30 Uhr

**1090 Wien, Währingerstr. 17, "Kavalierstrakt",
1. Stock, Seminarraum von VERA**

P. Hille

W. Kutschera