

INSTITUT FÜR ISOTOPENFORSCHUNG UND KERNPHYSIK  
DER UNIVERSITÄT WIEN

E I N L A D U N G

zum

S E M I N A R V O R T R A G

von

**Istvan Ratja**

Institute of Nuclear Research of the Hungarian Academy of Sciences  
(ATOMKI), Debrecen, Hungary

**Research Activities at the Department of  
Electrostatic Accelerators of Atomki  
Debrecen, Hungary**

Our Department has 2 home-made Van de Graaff accelerators (1 MV and 5 MV nominal terminal voltages), the most commonly used ions are p, He<sup>+</sup> and d.

There are two subgroups within the Department:

The mission of the nuclear astrophysics subgroup is to gain and distribute new scientific results concerning nuclear astrophysics. The primary goal is to perform basic experimental research aiming at reactions relevant to various scenarios of nucleosynthesis, while the secondary goal is to reveal the structure of nuclei having importance in the nucleosynthesis.

The IBA (Ion Beam Analysis) subgroup employs the following analytical techniques: PIXE (Particle Induced X Ray Emission Spectrometry), RBS (Rutherford Backscattering Spectrometry), PIGE (Particle Induced Gamma Ray Emission Spectrometry). These microanalytical methods are available both in broad-beam and microbeam versions. The simultaneous detection of heavy and light elements have been developed using two Si(Li) X-ray detectors (Be-windowed and UTW). The applications are in the fields of archaeology, geology and aerosol science. Proton Beam Micromachining is the latest application of our Scanning Proton Microprobe.

Finally, a summary will be given on the status of the re-commissioning of the ex-Oxford AMS General Ionex Tandatron Accelerator.

*Mittwoch, 28. Mai 2003, 16:30 Uhr*

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

P. Hille

W. Kutschera