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

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Accelerator Mass Spectrometry of ^{39}Ar for Oceanographic Research

Cosmogenic ^{39}Ar has a half-life of 268 years and a conservative geochemical behaviour, which makes it one of the most-sought dating and tracing tools for oceanography. In particular it is ideally suited to study what has been named the Atlantic conveyor belt system, one of the important regulators of the world's climate. However, an extremely low isotope ratio of $^{39}Ar/^{40}Ar = 8x10^{-16}$ makes the detection of ^{39}Ar at natural levels a major technical challenge.

The topic of this talk will concentrate on an international effort to develop a viable method for the measurement of ^{39}Ar at natural levels with accelerator mass spectrometry (AMS) at the Argonne Linear Accelerator System (ATLAS). Results of the most recent experiments at the ATLAS facility will be presented.

Donnerstag, 8. März 2001, 16:30 Uhr

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

P. Hille W. Kutschera