



Einladung zum Vortrag

“Accelerator Mass Spectrometry: physics of slow & fast ions at the service of applied sciences”

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Termin: Freitag, 11.03.2022, 13:30 Uhr, Lehrprobe 14:00 Uhr

Online:

<https://univienne.zoom.us/j/67339599683?pwd=RVpyY2J6VXdoQWk0N3VBa3BZRmXMQT09>

Meeting ID: 673 3959 9683

Kenncode: 341713

Abstract:

The progress of Accelerator Mass Spectrometry (AMS) as a highly sensitive and selective technique to separate rare isotopes is driven by the investigation of the fundamental physical processes of ion generation and transport. Research on charge exchange processes in the accelerator has made compact AMS facilities competitive for measurements of many typical AMS nuclides (e.g. ^{10}Be , ^{129}I , actinides). In recent years, isobar suppression at low energies has entered a new era with slowing down ions intentionally in an ion cooler to use laser photodetachment for selective reduction of interferences. I will present how these developments allow new applications of trace isotopes to date environmental archives, to follow man-made radionuclides or to investigate past changes of the Earth's magnetic field.

Im Rahmen des Vortrages findet eine Lehrprobe zum Thema
„Accelerators for Nuclear Physics“ statt.