Course: Accelerator Mass Spectrometry

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Requirements for participation:
Basic Knowledge in Nuclear Physics

Type of module examinations:
One oral examination at the end of the module

Duration of the course:
1 semester

Aims of the course:
Introduction into the basic concepts and techniques of mass spectrometry and accelerator mass spectrometry (AMS) will be given. Selected applications from different research fields will be presented.

Contents of the course:
- Definitions and general aspects of mass spectrometry
- Mass spectrometers
- Ion sources
- Accelerators
- Detectors
- AMS facilities (layouts)
- Ion optics
- Isobar separation
- Selected applications in Archeology, Geo-Science and Environmental Science

Recommended literature: