



E I N L A D U N G
zum
V E R A - S E M I N A R
von

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**State-of-the-art thermal ionisation mass
spectrometry (TIMS) – an analytical technique
approaching its 100th “birthday”
and still going strong**

The first report of analyses of ion beams (or “positive rays” as they were called at the time) produced by thermal ionisation and using a magnetic sector field was published 97 years ago (A.J.Dempster; *Phys. Rev.* **11** (1918), p 316). In the meantime the technique has developed a lot and TIMS is still the method of choice for many applications in various fields of research. No other technique can routinely achieve higher reproducibility for the analysis of selected isotope ratios than TIMS (e.g. 2-3 ppm relative standard deviation for Sr or Nd).

This presentation will introduce the hardware and the procedures required to achieve such high-precision measurements. Also, the current status of a development of the TIMS ion source will be presented, the thermal ionisation cavity source.

Donnerstag, 08. Oktober 2015, 16:30 Uhr
1090 Wien, Währinger Str. 17, "Kavalierstrakt",
1. Stock, Victor-Franz-Hess-Hörsaal