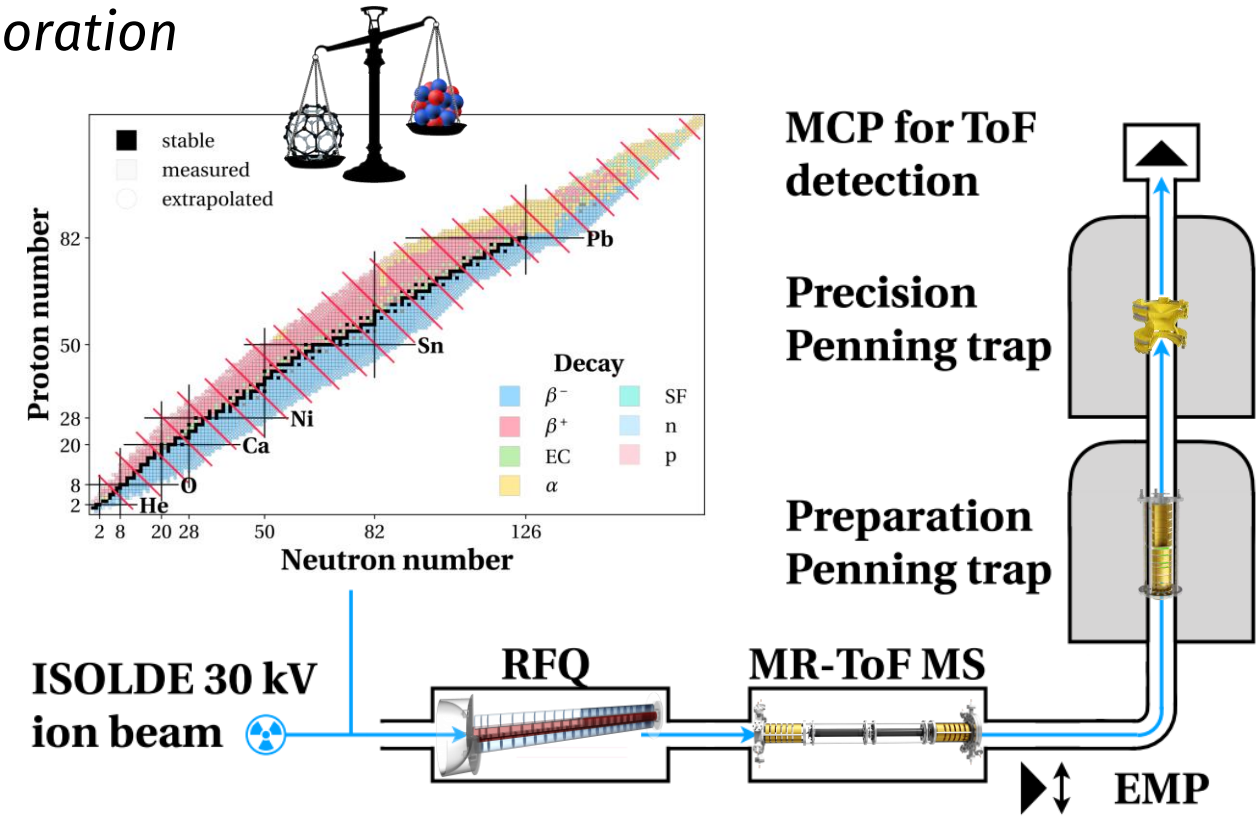
A New Laser Ablation Ion Source for ISOLTRAP

Lukas Nies
CERN and
University of Greifswald (GER)
For the ISOLTRAP Collaboration

Motivation and Applications

- Systematic studies of uncertainties of
  - Multi-Reflection Time-of-Flight Mass Spectrometer (MR-ToF MS)
  - Phase-Imaging Ion-Cyclotron-Resonance (PI-ICR) technique
- Source of various reference masses
- Ablation of long-lived radioactive ions



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- **How it works**
- **Design considerations**
- **History of LAS at ISOLTRAP**
- **SIMION simulations**
- **Daily struggle in the lab**