

Title: The ISOLDE facility: why nuclear physics at CERN?

Lecturer: Dr LINDROOS, M

Date and Times: 13th July at 14:00

Summary of the proposed talk

The Isotope Separation On-Line (ISOL) technique evolved from chemical techniques used to separate radioactive isotopes off-line from irradiated "targets". The ISOL targets of today, used at e.g. ISOLDE, can be of many different types and in different phases but the isotopes are always delivered at very low energies making the technique ideal for study of ground state properties and collections for other applications such as solid state physics and medical physics. The possibility of accelerating these low energy beams for nuclear structure studies, and in the long term future for neutrino physics, is now being explored at first generation radioactive beam facilities. The ISOLDE facility at CERN is one of CERN's longest running experimental areas and the only CERN facility dedicated to nuclear physics and its applications.

Prerequisite knowledge and references

None

Biography

Doctor Mats Lindroos

- **1961:** Born north the Arctic Circle
- **1988:** Physics engineering degree from Chalmers University of Technology, Gothenburg, Sweden
- **1993:** PhD. in Nuclear Physics at the same University
- Research fellow at ISOLDE followed by a staff position at the PS division
- **Today:** Technical coordinator of the ISOLDE facility and responsible at CERN for the EU studies BENE and EURISOL