



Contribution ID: 73

Type: Oral

The ISOL@MYRRHA project at SCK•CEN

Monday, 21 May 2012 17:50 (20 minutes)

The idea of ISOL@MYRRHA was born 5 years ago, when a feasibility study was initiated within the “Belgian Research Initiative on eXotic nuclei” network project. This facility should use up to 5% of the 2-4 mA proton beams delivered by the MYRRHA linac, for the production of Radioactive Ion Beams (RIBs) via the Isotope Separator On Line method. By combining the high primary-beam intensity (up to 200 μ A) with selective ionization and a beam purification system with high mass-resolving power, it will be possible to produce intense RIBs with high purity. ISOL@MYRRHA aims to be complementary to existing facilities, focusing on experimental programs requiring long uninterrupted beam times. These are experiments which

- hunt for very rear phenomena,
- need high statistics,
- need many time-consuming systematic measurements,
- have inherent limited detection efficiency.

Based on the feasibility study, the detailed technical design is now in preparation. In this presentation, I intend to introduce the ISOL@MYRRHA project and to discuss its status and perspectives.

Primary author: Dr POPESCU, Lucia (SCK-CEN)

Co-authors: Dr PAUWELS, Dieter (SCK-CEN); Dr VANDEPLASSCHE, Dirk (SCK-CEN); Prof. AÏT ABDER-RAHIM, Hamid (SCK-CEN); Dr WAGEMANS, Jan (SCK-CEN); Mr SCHYNS, Marc (SCK-CEN); Prof. HUYSE, Mark (KU Leuven); Prof. SEVERIJNS, Nathal (KU Leuven); Dr SCHUURMANS, Paul (SCK-CEN); Prof. BAETEN, Peter (SCK-CEN); Prof. VAN DUPPEN, Piet (KU Leuven); Prof. RAABE, Riccardo (KU Leuven)

Presenter: Dr POPESCU, Lucia (SCK-CEN)

Session Classification: Future RIB Facilities

Track Classification: Future RIB facilities