

## Minutes of the ISOLDE Physics Group Meeting, 14<sup>th</sup> of Nov 2018

A very short meeting today. No news from the technical meeting today. Only physics.

**Technical news: n.a.**

### Physics

- Last protons at ISOLDE last week. 5 experiments on 2 separators at the same time.
- Neutron converter tests: Very successful. Could measure the yield of several isotopes using I, Ga, Zn with RILIS and several other isotopes without RILIS. Na, Rb, Cs without. Over 100 yields! Jao Pedro was very happy. ISOLTRAP's MRToF helped out and can also give some idea on the contamination on different species. Conclusion if the new halo-design works better than old converter type is not yet clear
- Production measurements for MEDICIS at GLM for yields of Fr, Ra, Ac. Release curves could be difficult due to diffusion of Ac inside the target material.
- Thorium isomer via beta-decay of Ac. Soft landing was successful
- Wizard powered up the magnet. Test the scheme of how Ar32 would be measured. For 3 shifts, <sup>32</sup>Ar was inserted and very first data was taken as a proof-of-principle.
- Phosphor. Measuring conversion electron factors for Thorium project as well. Implantation in CaF
- Al experiment. Looking for quantum computing applications. Better yield for Al31. Photoluminescence spectroscopy.
- This and next week: Long-lived radioactivity experiments:
  - Be run is currently having some Li contamination.
  - RaF molecule with CRIS. Used for EDM and parity-violation tests. First step is benchmarking quantum-chemistry calculations

### Safety

- Hand-foot monitor tests HAVE TO BE DONE when visitors leave ISOLDE! See mail of Hanne from last week.

### Visits

- Next week Monday: 18, 2 guides requested at 14h. (Tassos volunteered, a second guide will be appointed).

### AOB

- We will fix a date in January for a reception to celebrate the good last year.
- Slinks that are used for Craning have been spreading around. Please bring them back when you have used them.

## **Seminar**

- The PGM was followed by a seminar of Stephan Malbrunot-Ettenauer with the title: “MIRACLS: The multi-ion reflections apparatus for Collinear Laser Spectroscopy of radionuclides”.

The next PG meeting will take place on Wednesday, 21<sup>st</sup> of November at 14:00 in the ISOLDE visitors' room (26-1-022).

Minutes taken by SMS