

Minutes of the ISOLDE Physics Group Meeting, 31th of Oct 2018

Technical news

- **GPS**
 - Setup for Cd beams is facing target issues.
Was more or less in time until all thermocouples failed
this is the 6th time this target will be used
- **HRS**
 - End of TI run last week and start up for Vito soon.
 - Issues with QP180 (unstable). Will be investigated
 - Monday: tests for molecular beams and target exchange planned
 - Robot tests are ongoing at the moment
 - New donut-shaped p-n converter will be tested soon as well
(will be used for elements such as Zn and Sn)
- **REX/HIE-ISOLDE**
 - Have been facing some application issues. Reboot seems to have worked. Will be investigated further
 - Cathode is nearing its end of lifetime it seems (fluctuating a lot)
 - Testing of an amplifier as spare from Linac 2 ongoing
- **RILIS**
 - Setting up for p-n converter tests
- **Targets**
 - Target for Wisard tests is going to the offline laboratory today
- **MEDICIS**
 - Irradiations have taken place.
Mostly for winter physics (after proton beam stops) but also for Tb production

Physics

- VITO: BetaNMR on Na (DNA interaction).
Have included B-field stabilization to the PPM level.
the experiment was a big success
Minor issue due to a crack in the CEC insulator.
Smooth operation from the ISOLDE side
- SSP: Multiferoic experiments finished all sample materials.
PAC initially suffering from low beams in first 3 days
Obtained a Quad moment measurement of the Cd isomer with a precision of ~2%. (=5X better than before)
- SPEDE: TI decay of even-mass $A = 186-180$ isotopes. 7keV resolution at low energy. The aim is to get very precise conversion coefficients, construct level schemes and do angular correlation measurements.
Run went very smooth.
180TI was not measured with enough statistics (yield issue). Might be for a future proposal

- ISOLTRAP: Test recent technical developments of the MR-ToF and test its performance for mass measurements.(very close to stability, not very exotic). Issues occurred at first, but after changing to A=154 (stable), the end of the run went very well
- WISARD: Test of the WITCH magnet ongoing. Magnet was powered and they got data on the effect this has on other experiments when operating at strong Bfields.

Safety

- There has been some contamination during the Cd run. Procedures will be evaluated and might change. It was a minor incident.

AOB

- Proposal for creating ISOLDE social media account received little enthusiasm but will be discussed at the collaboration meeting next week
- SPSC committee meeting data:
ISOLDE received 60% of PSB protons
- New ISOLDE pump stand arrived

Seminar

- The PGM was followed by a seminar of Mildren Rich with the title: "Diamond Raman lasers and amplifiers – Status and future".

Minutes taken by SMS