

Minutes of the ISOLDE Physics Group Meeting, May 16th 2018

There were no comments to the minutes of the last ISOLDE PGM

Technical news

- **HRS/GPS/RFQ**
 - Operation: relatively smooth week. Not much to report in the technical meeting
 - Nice run on GPS: emission channeling of Mg. Continuation of last years work. Smooth 3-days run.
 - GPS: some problems –especially with controls – with new tape station, which is not yet working optimally.
 - HRS:
 - Setup started Tuesday for Br experiment
 - During Br experiment: ZrO target provided quite some contamination and lower than expected Br yields
 - Setup for VITO ongoing. Outgassing very long time. Now normal conditions. Vito will get beam tonight.
 - During this week: First MEDICIS irradiations probably, otherwise next week.

- **REX/HIE-ISOLDE**
 - Nothing to report

- **RILIS**
 - Mg setup went very well.
 - Pump laser had to be returned to manufacturer on Friday (before the normal end of the run)
 - Other laser that has been under repair for 3 months is in Geneva and should arrive this week
 - Intervention during next week to replace coated window during last ZrO run.

- **Targets**
 - All targets made until the end of June. Not much to report.

Physics

- Frank Wienholtz presented their results obtained during the Br run:
 - Goal: Determine Q-value of superallowed b-decay of ⁷⁰Br.
 - Much more contamination than expected.
 - Much lower yield (factor 100) than expected – Did not see ⁷⁰Br
 - Checked also sidebands ⁷⁰Br²⁷Al and similar species.
 - In the end, one of the ISOLTRAP controller of their vacuum pumps broke and run had to be stopped prematurely.

- Important to notice: Similar to last year: Strong contamination seen coming DIRECTLY from ISCOOL after spectroscopy run. From strong beam implanted in cooler? = ISCOOL becomes source of fA beam
- Miguel discussed planned VITO run this week. Trying to measure b-NMR of DNA quadruplexes. Beamline dis- and reassembled. Magnetic field imperfections are currently being probed (should be order of ppm). Stable beam delayed by 1 day due to outgassing and bad vacuum. Will be tested tonight.

Safety

- No Comments

Visits

- No visits planned in the coming 2 weeks.

AOB

- Call for INTC has been sent out. No new LOI's or experiments will be presented this time due to LS2.

Seminar

- The PGM was followed by a seminar of David Sharp with the title: "Nuclear structure information from Transfer reactions".

The next PG meeting will take place on Wednesday, May 23rd, at 14:00 in the ISOLDE visitors' room (26-1-022).

Minutes taken by SMS