

Minutes of the ISOLDE Physics Group Meeting, November 29th 2017

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

Technical news

- GPS
 - A new TISD target was installed this week, replacing the LIEBE target, which was not in good-enough condition to install on the front-end. It is a UO target, with MgO mixture to prevent sintering and a special VADIS ion source with modified geometry, which is supposed to enhance the production of laser ions.
 - There was a problem with the Anode 2 power supply, which was now replaced.
 - During the night VITO will take beam for beta-NMR measurements with Na.
- HRS/REX/HIE-ISOLDE
 - Since Tuesday evening last week $^{28}\text{Mg}^{9+}$ has been delivered to Miniball for a plunger g-factor experiment.
 - The beam time went smoothly. There was a trip of the line heating over the week-end and the IHS water interlock has again caused some interruptions. There seems to be a problem with the cooling water pipes which will be investigated during the shutdown.
 - Some trips of CAO elements and of HRS.QP330 are still occurring.
 - Due to the strong Mg beam, the proton current was limited during the run (only 0.2-0.3 μA).
 - Currently there are ISS tests ongoing and beam has already reached the delivery point at XT02. An important test will concern the beam transport with the magnetic field ramped up.
- RILIS
 - The chiller of one of the pump lasers broke and the laser interlock did not shut down the laser, which means that the laser is probably damaged now.
 - The RILIS team is involved in the ongoing TISD tests, with schemes for Mg (today), then Hg and perhaps Mo.
- Targets
 - The target #624 (SiC) which was used for the Mg run has performed well. The test UO target #620 is the first of its kind.
 - Next week two empty plug targets will be installed on the two front-ends, to be used in the start-up process next year.
- MEDICIS
 - Friday and over the week-end the first irradiation of a MEDICIS target will be performed.

Physics and schedule

- The Mg run went well. Although preliminary, the data will likely allow determining the g factor of the first excited 2^+ state.
- The upcoming VITO run will aim at performing beta-NMR of Na implanted in ionic liquids. Followings several improvements since the September run, this new experiment will investigate again the preservation of polarization, chemical shifts, resonance width etc.

Safety

- There were some discussions concerning the new type of target installed on GPS. The target was approved but the safety team would like to be informed more in advance.

- The magnet of the ISS experiment will be ramped up until Sunday. People with pacemakers should avoid the area.
- The ISOLDE access procedures have slightly changed and will be updated on the website.
- Four of the last six ISOLDE safety courses have been cancelled. The possibility of a local instructor for ISOLDE courses will be discussed.
- The people who require access to CERN during the Christmas shutdown should send their name and reason for access to Gerda, who will communicate a centralized list to Michael Doser.

Visits

- Next week will take place the ISOLDE Workshop. As usual, a visit will be organized for the workshop participants. Volunteers will be kindly asked to help out with the visit.

AOB

- On December 8th at 16:30 will be an end-of-operations drink in b. 508.
- The deadline for INTC documents for the February session is January 10th 2018. During LS2 the entire shift backlog will be reviewed. The start-up of ISOLDE after the shutdown will be earliest November 2020, but it might, in the end, be April 2021.
- The fuse of the ISOLDE coffee room trips when both the microwave and the water kettle (and perhaps also the printer) operate at the same time. The circuit breakers are not accessible without a Service Desk request. Therefore, at least the microwave oven and the kettle should not be powered from the same socket.

Seminar

- The meeting was followed by the seminar of Robert Berger from the Philipps-Universität Marburg with the title "Molecules as versatile probes for physics beyond the standard model".

The next PG meeting will take place on Wednesday, December 13th, at 15:00 in the ISOLDE visitors' room (26-1-022). It will be followed by the talk of Ivan Kulikov from GSI with the title "Search for long-lived isomers in neutron-rich Hf isotopes in the Experimental Storage Ring".

Minutes taken by VM