

Minutes of the ISOLDE Physics Group Meeting, April 4th 2018

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

Technical news

- HRS/GPS
 - The cold check-out is almost ready.
 - The SEM-grid tests took place last week on both separators. Two iterations were required for HRS and the tests were finished on Tuesday. The focusing was readjusted in the second iteration. Wednesday the grid was installed on GPS and the test was finished ahead of schedule. The GPS settings have a rather strong steering and there is a slight mismatch between the grid and the proton-beam diagnostics in front. However, the mismatch is low enough not to pose any worries.
 - A number of ISCOOL tests were performed. There were some issues initially with a leak in one of the gas-mixing lines of the target, however it was not a show stopper. A lot of aspects were checked, but for now it is difficult to draw any clear conclusion. Further investigations are necessary. Preliminary notes include a difficulty to transmit the beam through the cooler, difficulties caused by the fact that the He gas valve is on manual control, as well as the observation that the kick-mode extraction is not yet bringing an improvement in peak width. Stewart is willing to help users with the set-up of the ISCOOL for beam times, if needed. A necessary intervention to perform soon is the installation of the new voltage divider for the laser-spectroscopy runs.
 - Many target changes have been performed on GPS, in order to check if the used targets are leak tight. GPS remains in stand-by until the carbon-nanotubes target will be installed.
 - The first target installation took place on HRS this morning.
 - Some further HT tests will take place on HRS using a neutron-converter target unit. They will be followed by the beam set-up for the upcoming CRIS experiment.
 - There are still significant issues with the beam diagnostics, which are not very responsive and require restarts of the corresponding front-end PC. Although the expert application makes things a bit easier, it does not solve the problem.
 - The magnet power supply of GPS is tripping quite often.
 - The tape-station of ISOLDE hasn't been checked yet.
- REX/HIE-ISOLDE
 - The cryo-modules are in the cooling phase and the HIE-ISOLDE beam has been sent already up to the first cryo-module.
 - The 3rd cavity of the 4th cryo-module (the latest one to be installed) has an RF issue. It is currently under investigation. It is unlikely that it can be solved on site. It will not affect Coulex runs of the year, but it is possible for it to affect the runs using the highest energy.
- RILIS
 - The setup of the In ionization scheme for the CRIS run will be ready by the end of the week.
 - A new borrowed laser system is being tested as a possible replacement for the Blaze system.
- Targets
 - The target for the CRIS In run (LaC) is on-line and will be set up (first run of the year).
 - The carbon nanotube target for the ⁸B run at IDS is on schedule (second run of the year).

Physics and schedule

- Tomorrow, a preliminary start-up meeting for the CRIS beam-time will take place. The CRIS beam-time aims to continue the laser spectroscopy of exotic In isotopes commenced last year.
- The In run starts on Monday. Tuesday-Wednesday next week the beam will be set up at a voltage of 40 kV (most likely).

Safety

- The radiation monitoring system is now in beam mode.
- A new person was appointed in the RP group (Fabio Pozzi).

Visits

- There are no visits this week.

AOB

- Some of the ISOLDE members will change office after the meeting. It was pointed out that it is important to limit to no more than 3 the number of people occupying the very small offices (below 16 m²).
- Users still having problems with hostel booking are requested to ask to be placed on the reserve list and contact Jenny with the exact travel dates. It is also important to book whatever is available, even if it does not cover the full period, before a full booking can be secured.

Seminar

- The meeting was followed by the first part of the seminar series of Andrei Andreyev from the University of York with the title "Nuclear Fission in the 21st Century: A Review of Experimental Advances and Phenomenology" (second and third parts to follow on Thursday and Friday).

The next PG meeting will take place on Wednesday, April 11th, at 14:00 in the ISOLDE visitors' room (26-1-022). It will be followed by the seminar of Patric Muggli from the Max-Planck-Institute for Physics with the title "Plasma wakefield acceleration and the AWAKE experiment at CERN."

Minutes taken by VM