Minutes of the ISOLDE Physics Group Meeting, April 11th 2018

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

Technical news

- HRS/GPS
  - Normal ISOLDE operation was resumed.
  - There have been problems with beam instrumentation: Faraday cups, wire scanners. For the latter, the 25 pA scale is no longer available, which poses problems for optimizing. This scale was removed at the FESA level and now needs to be re-implemented only for ISOLDE. The problems are still being looked into. In case of problems, the users are advised to contact Eleftherios Fadakis.
  - Last week was dedicated to the CRIS set-up on HRS. The LaC_x target was installed on Wednesday.
  - The HT recovery tests with beam on the neutron converter were performed on Thursday and went very well. The 1-ms recovery time is confirmed. On Friday the ISCOOL voltage divider was installed (for the laser-spectroscopy measurements).
  - Following these tests, the separator was set up with ^{85}Rb for CRIS. Over the week-end, CRIS used stable HRS beam for various tests.
  - The GPS magnet power supply still trips quite often. A software work-around was implemented and a more permanent solution will be addressed later.
  - The vacuum tests of various re-used targets (performed on GPS) went well.
  - This week there have been some problems with the ISOLDE tape station. The tape was replaced and, upon inspection, it was discovered that the old tape had been placed with the wrong side facing the beam, which might explain some measurement problems experienced in the past (eg. with noble gasses). The tape-station problems did not allow performing the proton scan. A lot of effort was spent in order to get it back on track (work still in progress). If the attempt is not successful, the proton scan will be performed on a Faraday cup or using the diagnostics of CRIS.
- REX/HIE-ISOLDE
  - The room-temperature RF system has been optimized.
  - The EBIS cathode needs to be replaced. This will require about two weeks down time.
  - The cooling of the superconducting cavities has begun, so far everything goes as expected.
- RILIS
  - The In scheme for the CRIS run is ready.
  - The new pump laser which has been tested will be kept as a back-up.
- Targets
  - The C nanotube target (to be used for the B run) had an anode problem, but fortunately the back-up target is fine.
  - The first ZrO target (for Collaps) is being tested, while the second one (for ISOLTRAP) is under production.
  - The LIST target is being calibrated off-line.

Physics and schedule

- CRIS will begin the first run of the year, which is a laser-spectroscopy study of the structure of In isotopes, with the goal of reaching ^{100}In. The run will last until Tuesday morning.

Safety

- There has been an opening of the MEDICIS front-end.
- Electrical inspections of some setups have been performed and the reports are being prepared.
- In the future, ISIEC files might be required also for the safety clearance of travelling experiments.
- A new fume cupboard will be installed for GLM/GHM experiments in the second half of the year.

Visits

- On Friday next week there will be a visit of Lund high-school students and one guide would still be necessary.
- On 2nd May there will be a visit of Gothenburg students.
- A group of Swedish high-school students will come to ISOLDE for a two-week internship in June. One should check access requirements and limitations, before deciding on specific projects.

AOB

- Locals and beam-time participants are kindly requested to keep the ISOLDE kitchen and mechanical workshop in a good state and take trash to the containers outside. Karl will request to bring back the periodic cleaning of the building to a twice-per-week regime.

Seminar

- The meeting was 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."

The next PG meeting will take place on Wednesday, April 18th, at 14:00 in the ISOLDE visitors' room (26-1-022). It will be followed by the seminar of Marine Vandebrouck from CEA Saclay with the title "Probing the effect of the continuum on the proton-neutron interaction via the study of ^{26}F".

Minutes taken by VM