

Minutes of the ISOLDE Physics Group Meeting, March 22nd 2017

There were no comments to the minutes of the previous meeting.

Technical news

- A number of ISOLDE turbo pumps were maintained last week and now all vacuum sectors of ISOLDE are pumped again.
- Following some updates, the controls of the magnet power supply on GPS were inverted: now remote control actually corresponds to manual and vice versa.
- There were some problems with the HRS slits, initially only related to controls but in the end also mechanical.
- The new HRS target unit is vacuum tight, confirming that the HRS leak was on the old target, not the front end.
- Tim and Miguel performed some studies of tuning the ISCOOL with the automatic optimizing software. The ISCOOL was used at 40 kV. The transmission achieved with the software is similar to the one obtained manually by Miguel (about 80%) but the beam profile was different.
- Miguel has been investigating beam transport and diagnostics along the different beam lines.
- In the Technical Meeting Fredrik reported a possible problem with the EBIS cathode. Fortunately, this morning it seemed not to be the case.
- RILIS is performing tests of selenium ionization. The ion source has a modified geometry, including an iridium foil which reflects the beam back into the ionization cavity to produce two-photon ionization.
- The SAS is currently full of boxes and beam-diagnostics parts. Some room will be required for the delivery of a RILIS Edgewave laser, being returned from repairs.
- A group from Mainz is currently at ISOLDE in order to perform LIST tests. Nevertheless, there will be no device available for users before next year.
- In the week before Easter the targets from the Intersecting Storage Ring will be delivered to the class A area.
- Some of the old labs in b. 3 are being turned into offices.
- The air conditioning in b. 508 will be tested by the team which performed the installation work.
- One should remember to check in the technical meeting what is the status of the ISOLDE beam gates.

Safety

- Following the OFSP visit in January, a letter was received with a number of safety issues to address. It is currently being looked into.
- There was a request from EP not to have any collections during the first half of the year, before all safety-related paperwork is finalized.
- The annual safety visit of b. 275 will take place next Tuesday afternoon. A clean-up meeting will take place tomorrow morning.
- Users should not forget to register for safety courses a few weeks in advance of their arrival at CERN.

Schedule

- The schedule until the end of June has been released. An e-mail concerning ENSAR2 funding will be sent out soon.
- The SEM grid for the proton beam will be placed on HRS first, which will allow installing the CaO target as soon as possible for the first run of the year.
- A possibility under discussion is to irradiate a number of targets at the end of 2018 and continue a series of experiments without protons on long-lived nuclides. Richard Catherall will defend the case in front of the Accelerators division tomorrow. Representatives of the experiments are asked to send him by the end of the day slides with possible uses of such beams. There will be a call for letters of intent for this type of experiments before the next INTC meeting.
- The experiments with long-lived isotopes would take place in the first half of 2019 and would be followed by the realignment of the ISOLDE beam lines. This re-alignment operation was agreed upon by the ISCC, considering also the fact that there will be anyway a general dismantlement of beam lines for replacing diagnostics elements. Mark Bissell pointed out that the switchyards are a special set of elements, as their position inside the vacuum chamber can be adjusted from outside. At least for these elements the alignment must take into account the real position of the plates inside the vacuum chamber (not only the outer references).

Visits

- There is a number of visits next week, including a visit of UK high-school students on Monday and of Swedish students on Wednesday. Three guides are urgently needed for Monday.
- There will be a VIP visit of members of the IAEA on Thursday next week, at 14:00.
- Kara is refining the general ISOLDE presentation for visitors. The local group is kindly requested to send a couple of slides for each experiment (one for the technique, one including some recent highlights).

Seminar

- The meeting was followed by the seminar of Wenjia Huang from CSNSM, Orsay on *"Introduction to the Atomic Mass Evaluation"*.

The next PG meeting will take place on Wednesday, March 29th, at 14:00. It will be followed by a seminar by Joao Pedro Esteves De Araujo from University of Porto on *"Multifunctional materials and nanostructures: opportunities for materials and solid state physics studies at ISOLDE"*.

Minutes taken by VM