

Minutes of the ISOLDE Physics Group Meeting, 15th of August 2018

Technical news

- General

- Operations were fairly straight forward. Last of 5 weeks of Coulex. Laser-ionized tin isotopes.
- Setup Tuesday/Wednesday
- Saturday : Linac 2 went down and recovered by itself. This was the main interruption of last week.
- New tapestation is getting more and more into operation. A release curve was measured, but some problems with the segmented FC are still present.
- New beam optimizer (dev by Emiliano) was tested for beam tuning to GLM. . This is a CERN standard. A factor of 2 in transmission was gained after a short while (less than an hour). Can be rolled out as a program for the users. Friday 08h30 in the control room, a meeting will be held for training users.
Note : if you use the optimizer for a tune, specify in the file name !!
- Tuesday next week, several Technical interventions are planned throughout the day. Some planned interventions include :
 - Replacement ebis cathode
 - Solving issues with interlock vacuums (HRS)
 - Several FC interventions planned
 - Intervention planned for correcting He flow of cryomodule

- GPS

- Started with the setup of the 8B experiment. Currently the target is underperforming. Hopefully, problems can be fixed.

- HRS

- Coulex experiment on 106Sn at 4,4 MeV/u at miniball ran last week.

- REX/HIE-ISOLDE

- EBIS cathode has still been degrading over summer. It's getting more and more critical. Will be changed before the Be starts.
- Noise in HIE-ISOLDE faraday cups has risen, but Elefterios temporarily fixed it until experts come back from holiday
- Cavity that was out of order is back online.

- RILIS

- Some problems with shutter, which fell down.
- NOTE = The status reviewer of the shutter only updates once every supercycle. Inform the RILIS team of your plans so they can take actions.
- Stay on Sn for next week as well

- MEDICIS

- Took protons, but got very little material out for collections. Problems are thought to come from beam focusing.

- **Targets**

- LaC target used for the Sn experiment made use of a sigradur sleeve. This seems to have performed well.
- Planned target on the B target failed. First C-nanotubes that was previously used acts as a replacement. Anode problems ongoing. Currently contamination of doubly-charged molybdenum on the same mass-to-charge ratio as BF. A solution will have to be found. Meeting will be held after this one.

Physics

- Miniball: Yield was higher than expected in Coulex-experiments of last week. For the heaviest one ^{110}Sn , there was no contamination (wrt 10% in earlier measurements). B(E2) systematics taken that can be compared to large-scale shell model calculations. Nice work by everyone involved from RILIS, operators etc..
- Next experiment on 8B. Goal to study reaction dynamics with the target and how the structure affects the interaction. (8B on Zn) Proton-halo case is expected to interact differently than neutron-halo cases. Want to measure elastic scattering and breakup as basic goal of the experiment. Can be done with few 1000/s but not with few 100/s.

Safety

- Nothing particular to mention

Visits

- This week: international teacher program. (Wednesday 9h30)
- Next two weeks: Nothing planned yet.

AOB

- In the kitchen there is now a PET container for bottles. If it is full, you have to send a ticket to the service desk.

Seminar

- The PGM was followed by a seminar of summerstudents Carmen Victoria Villalbe Petro with the title: "Exploring the possibilities of a PicoScope at Collaps" and by Gabriel de la fuente Rosales with the title "Simulations of the new SPEDE detector at IDS".

The next PG meeting will take place on Wednesday 22nd of August at 14:00 in the meeting room of building 508.

Minutes taken by SMS