

ISOLDE Physics Group Meeting 22/08/2018

Technical news

- **GPS**
 - Tough week with ${}^8\text{B}^{19}\text{F}_2$.
 - Original target failed before the run had even started.
 - Tape station was out of order which was very difficult to get yields.
 - Stable beam from HIE-ISOLDE to SEC (12C) on Tuesday night.
 - RIB on Wednesday, but power cut interrupted.
 - Optimisation to go from 10 /s at SEC to 350 /s, factor of >10 down.
 - PS restarted power supplies which brought down all chain.
 - RP gave permission to go up to 2.5 uA of proton current.
 - A few trips of the line and target heating over weekend, but became more stable as time progressed.
 - A Front-end computer (FEC) went down after the power cut, but was not accessible by the ISOLDE operators, or indeed noticed by PSB operators. It meant that the proton request was not observed and this resulted in several hours downtime.

- **HRS**
 - CRIS this week with neutron-deficient Sn isotopes.
 - Tape station repairs went on last week during interventions to be ready for yield measurements of Sn.
 - New tape station broke again today, on-going discussion.

- **Beam lines**
 - CAO vacuum interlocks were updated and swapped. Hopefully solving the problem of the trips.
 - New fume cupboard at GLM/GHM.

- **REX/HIE**
 - EBIS cathode exchange went ahead on Tuesday, now pumping and baking out over the weekend.
 - Some repairs of power converters at HIE-ISOLDE.
 - Work going on for installation of ISS.
 - Cryo plant intervention has been postponed due to intervention made during power cuts last week.

- **RILIS**
 - Sn last week at Miniball and continues this week for the CRIS run.
 - Setup for next week with ${}^{11}\text{Be}$ on schedule.

- **Targets**
 - Doubly-charged Mo coming from ion-source killed the injection to the trap a little bit.
 - Lessons to be learnt for future runs, maybe the graphite ion source, especially for HIE-ISOLDE runs.

- **MEDICIS**
 - Had a few shots last week, but not so many samples.
 - Now there is a two-week shutdown and they'll be back in September.

Physics

- **SEC**
 - Aim to measure B breakup with large solid angle coverage of Si detectors at the Scattering Experiments Chamber (SEC).
 - Online analysis shows good quality data for the elastic scattering.
 - Some other reactions observed with the detection of protons.
 - Coincidences a very difficult to observe, maybe not enough statistics.
- **CRIS**
 - Aim to measure up to ^{103}Sn in collinear laser spectroscopy.
 - Approaching $N=50$ and the doubly-magic ^{100}Sn .
 - Looking at the single-particle behaviour and the evolution of the electromagnetic properties.
 - Measuring the spin is possible if there are enough statistics.
 - Ab-initio interests as they begin to reach this region, so strong motivation.

Other business

- **Visits**
 - Quiet the next two weeks, but guides required for September.
 - Friday 7th September needs a couple of guides (Italian group).
 - EMIS conference visit on Friday 21st September (around 100 people).
- **Safety**
 - Helmets and shoes as always! Installation of fume cupboard at GLM/GHM.
 - Hands-on electrical courses should not expire, but people were getting emails to say that they had to change.
 - The database had been set with 3 years by mistake but it was very difficult to change.
 - A new database is now running and if you do get kicked out of the hall, you just need to update the online electrical awareness training to get the correct training rank again (10860)
- **EMIS**
 - Up towards 200 people are registered (hopefully).
 - Help required from the local post-docs and PhD students, particularly in the week before for making up conference bags, posters, etc. Plus during the week for microphones, powerpoint, etc.
- **A.O.B.**
 - The kitchen at the corner of buildings 3 and 26 seems to be used by people outside of ISOLDE outside of working hours. Please ask them.

- WiFi intervention this afternoon at 17:00, the network will be cut for 15 minutes. Afterwards the WiFi will be awesome!!

A seminar by Ruben De Groot from Jyvaskyla followed the meeting, titled "Collinear laser spectroscopy at the IGISOL" - <https://indico.cern.ch/event/751738/>
Also a summer student presentation from Georgia Antoniou "Xe COLLECTION FOR THE γ -MRI PROJECT" was given.

Next week's meeting will be held in B. 508, at 1400.

Minutes taken by LPG