ISOLDE Physics Group Meeting 17/10/2018

Technical news

Quite some technical input needed last week.

Heaviest beam at maximum gradient of HIE-ISOLDE. Quite challenging in general. SC changed on the fly due to LHC tests, they also blocked cycles for long periods.

GPS

- o At on GANDALPH at GLM. Physics at this evening.
- o Monday afternoon everything was in place.
- o Some difficulty with tuning due to out-of-order quadrupoles.

HRS

o Beam delivered on Wednesday to ISS.

REX/HIE

- o EBIS has been very unstable. Being looked into
- Problem is thought to be due to the cathode.
 (in and out of electrical contact?)
- o Intervention on ST03 for broken stripping foil.

Targets

- Last target of the year fro CaO started yesterday.
- o Rest is done for rest of year.

MEDICIS

- MEDICIS has been radiating for collections for hospitals and for the PhD work of Simon Stegemann.
- Small issue of radiation hardness of the target container.
 Other try next week.
- o Will afterwards also try a larger container to better catch the beam.

RILIS

- Edgewave laser failed on Friday during ISS run.
 Spare taken from offline lab.
- o Humidity interlocks tripping at RILIS, fixed by Saturday.

Physics

VITO

 Will take positive radioactive ions after the negative ion runs of GANDALPH

ISS

- o ²⁰⁶Hg beam. ISS worked very well.
- o Some issues with setup (EBIS, Lasers), but not as bad in hindsight.

- At first, a lot of background, but by gating on the EBIS time allowed for removing the background by a factor of 400. Very nice spectrum!
- o Energy resolution about 140keV FWHM.
- o None of the states were known, 6-8 states were observed now.
- o Target carousel was operating well, but had 1 small issue.

SSP

- o This week, negative on GLM for GANDALPH. Electron affinities of At.
- o GANDALPH improved a lot since last try previous year.

Other business

Visits

- o This week, not many visits.
- o Minister of Science of Spain is visiting next week.

Safety

 Protons on target automatic recording to spread sheet lost during the summer and hasn't been up since.

• A.O.B.

No information

The meeting was followed a presentation of Mikael Reponen from the University of Jyvaskyla: "Recent laser developments at IGISOL"

The following meeting will take place on Oct 24, at 14.00h in the ISOLDE visitors room.

Minutes taken by SMS