

# Minutes of the ISOLDE Physics Group Meeting, June 20<sup>th</sup> 2018

## Technical news

- **HRS**
  - Scandium run went very smoothly
  - Night of Tuesday/Wednesday collections for medical isotopes performed
  - The cabling of QP180, which was tripping over the last weeks, was found to be wrong. It has been recabled now.
  - Standard maintenance on the gas system was performed (fixing leaks and faulty valves)
- **GPS**
  - List-target first time online since 2013 (List version 1 was installed, not shortened version 2)
  - Issues occurred with RF during first installation. Dismounting and remounting helped restore the problem, although nothing suspicious was found when it was checked in between on the test bench.
  - Experiment (decay spectroscopy of <sup>22</sup>Mg) was very successful. List target suppressed completely the surface-ionized <sup>22</sup>Na contribution.
  - Usual recurring issues with tripping of power supplies in CA0 and LA1. Nothing out of the ordinary that could not be fixed immediately.
- **REX/HIE-ISOLDE**
  - The first stable beam (<sup>22</sup>Ne) was sent to ISS for tuning at an energy of 9.4 MeV/u. Tuning through the collimators went easier than expected. Although the FC suppression does not work well in the magnetic field, it is thought that the transmission through the 32mm hole was excellent.
  - Several vacuum issues occurred throughout the week. ISOLDE operators do not yet have the rights to restore these, so the vacuum group had to be called in.
- **RILIS**
  - Setup for Mg and Dy last week
  - Another chiller unit went down. There is only 1 pump laser left now. Can't afford to lose another one before lasers of the offline lab have to be used as emergency measures.
- **Targets**
  - #664 was online this week and performed well
  - #662 was used during the night for testing of molecular beams
  - #655 (TaW) will go online this week
  - #658 for Bi run next week is OK. Temperature calibration has to be finished still.

## Physics

- Last week:
  - Bordeaux group performed run on  $^{22}\text{Mg}$  for fundamental physics. Run went better than expected and the users were very pleased with the performance of the LIST target.
  - Joonas Koonki gave an update on the first beam tests performed by ISS. Beam tuning went smoothly, other than some DAQ and noise issues nothing went really wrong. Finally, some protons were observed from the (d,p) reaction. Progress towards the first physics runs is ongoing.
- This week:
  - Non-medical collections for  $^{149}\text{Tb}$  will be ongoing.
  - Aim to ship 500MBq samples to PSI every morning.
  - Avoid being in the hall before 8:30 when the collections are planned to end in order to reduce unnecessary radiation exposure.

## Safety

- Next week Friday (29/06/2018), a general safety check of the ISOLDE hall will be performed. Please make sure to comply with all the rules regarding helmets/safety shoes/items on top of cupboards etc..

## Visits

- 1 visit planned tomorrow (Thursday 21/06) (Tassos/Victoria/Dinko)
- Next week: Visit of INTC board members.
- Several visits planned in July, including a visit of ISOLDE by summer students in 3 groups of 12 students. ISOLDE summer students can join any of the other planned visits in order to keep the limited available places free for other summer students.
- Recently received very positive feedback on the ISOLDE visits. Especially the fact that the running experiments can be visited (in contrast to e.g. CMS/ATLAS) was indicated as strong point.

## AOB

- The CERN Press office has written a short piece on the biologically-motivated experiments performed by VITO regarding DNA quadruplexes.
- The CERN Press office is writing another piece to highlight the Cr results from ISOLTRAP which will be released shortly.

## Seminar

- The PGM was followed by a seminar of Daniel Gaertner with the title: "Radiotracer diffusion in CoCrFeNi and CoCrFeMnNi FCC high entropy alloys".

! No PG meeting will take place next week due to the planned INTC meeting. Everyone is invited to join the open session on Wednesday 27/06/2018 from 13-16h in the council chamber. Status reports will be given on the MIRACLS, TAS and PUMA projects.

The next PG meeting will take place on Wednesday, July 4<sup>th</sup>, at 14:00 in b. 508 in the ISOLDE meeting room.

Minutes taken by SMS