

# ISOLDE Physics Group Meeting 18/07/2018

## Technical news

- **GPS**
  - Smooth startup of HIE-ISOLDE.
  - Monday IS644 setup using  $^{129}\text{Xe}$  (delivered to Miniball)
  - Collection on Tuesday night at GLM for  $^{131}\text{mXe}$ .
  - HIE-ISOLDE setup continuing until Wednesday ( $^{96}\text{Kr}$ ).
  - Target yields performed after low-energy setup.
    - Optimisation destroyed the settings, setup redone.
  - Thursday and Friday involved optimisation to enhance  $^{96}\text{Kr}$  over stable  $^{96}\text{Mo}$  from the ion source.
  - Target survived so far with  $5.6 \times 10^{13}$  protons already!
  - Collections planned on Sunday with  $\gamma\text{MRI}$  and Ulli Koster.
  
- **REX/HIE**
  - Accelerator behaved excellent, with very few trips.
  - Timing between proton pulse and TRAP investigated.
  - Trying to optimise delivery of 80 ms half life, so synchronisation key.
  - Beam energy was increased to 5.1 MeV/u on user request, to increase the cross-section and account for lower than expected yields.
  - $^{212}\text{Rn}$  will run over the weekend.
  
- **RILIS**
  - Tests on Si with HRS target unit,
  - No radiogenic Si observed... yet!
  
- **Safety**
  - Xe collections had a high beta-dose rate, finger monitors required but it all went ahead without issues.
  - Work is progressing with long-lived and high-intensity HIE-ISOLDE beams in terms of radiation safety.
  
- **Visits**
  - Guides needed for the CERN Summer Student tours in the next couple of weeks.
  - A few volunteers already, but some more spaces.
  - Hanne will send some reminder emails.
  - Check for the Xe sample removal with Magda on Monday.
  
- **A.O.B.**
  - Control room windows are leaking.
  - Repair is planned but source not yet identified.

A seminar by Ben Cooper from the University of Manchester followed the meeting, titled "Laser spectroscopy of positronium" – <https://indico.cern.ch/event/745115>

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

Minutes taken by LPG