Minutes of the ISOLDE Physics Group Meeting, April 5th 2017

There were no comments to the minutes of the previous meeting.

Technical news

- **Separators/REX**
  - The problem with the RFQ gas injection was solved. The malfunctioning PLC was replaced last week.
  - On Monday evening there was a brief reduction of the mains power, which tripped a few circuit breakers. A similar incident was reported by IDS and Miniball for Tuesday.
  - There was a leak on the compressed-air connection to the YCA0.BFC0680 valve, but it was quickly solved.
  - The RFQ is bunching quite well at 40 kV. It will be eventually tested up to 60 kV also in bunching mode.
  - There are some leaky valves in the separator area. The technical group is considering to exchange them.
  - Operations are returning to the engineer-in-charge mode, currently without night duty. The first engineer in charge is Emanuele.
  - The EBIS cathode had, in the end, to be exchanged. It was found to be significantly bent and thus had very low efficiency. This adds some down time to the HIE-ISOLDE preparation, but it will be probably recovered while the other systems are optimized.
  - Magnet cycling on GPS is still slower than usual. Nothing was however reported on the beam stability or reproducibility of the beam position. This is an important issue to address considering last year's problems.
  - There are some problems with the tape roll counters of the new tape station. The commercial ones purchased from Agilent are not working very reliably and Tim now prefers a home-made solution. This will introduce some delays in the commissioning of the tape station.
  - The accelerator fault tracking (AFT) system is implemented in the electronic logbook of ISOLDE. It allows better signaling error types and partially replaces ticket-based troubleshooting of common ISOLDE problems.
  - The initial plan for the cooling-ventilation work in b. 508 was for one company to perform the installation of the piping and for another to connect the installation to the general water network. In the end, it was decided to ask the same company, which worked on the installation to also perform the water connection, however this requires additional paperwork and will delay the start of the cooling circuit.
- **RILIS**
  - Camilo Granados joined the RILIS team as a fellow.
  - Katerina Chrysalidis has been working on testing silicon beams with RILIS. The outcome was positive. Currently and for the next couple of days the tests will focus on two-photon excitations. The selenium tests were not successful because some of the crystals purchased for this purpose absorb UV light and deteriorate. Bruce raised the hypothesis that this problem might also have occurred during the last zinc runs.
- **Targets**
  - Production is underway for the targets #595-597. There were some machining issues with the new bases, because they were not as finished as they should have been

Safety

- The ISOLDE RP responsibles have been going through the list of isotopes used for collections, splitting them in two categories, according to their level of risk. For the high-risk isotopes an augmented safety procedure will be necessary in the future.

Physics and schedule

- The selection of summer students from non-member states is ongoing.
- The Wisard experiment is being assembled (already the third week of work). The goal is to have the system under vacuum by the end of the week. It is planned to cool the magnet to cryogenic temperatures in the near future, which will require a significant amount of liquid nitrogen.
- Miniball has performed tests of the plunger system, especially in what concerns vacuum sealing.

Visits

- The visit of the IAEA Deputy Director went well.
- There were other visits of UK students on Friday and Monday.
- Next Friday morning there is a visit of Norwegian students for which guides are not yet assigned.
- The SharePoint website for coordinating ISOLDE visits is https://espace.cern.ch/isolde-visits-info/_layouts/15/start.aspx#/SitePages/Home.aspx .

AOB

- The Strasbourg tape station was delivered to b. 275, but currently it does not have the parts required for operation. Bertram is currently looking into the problem.
- ISOLDE welcomes Victoria Escalona, a new PhD student from KU Leuven who will work partly on the Wisard and partly on the VITO project.

Seminar

- The meeting was followed by the seminar of Pawel Moskal from the Jagiellonian University in Krakow on "*Tests of discrete symmetries using Jagiellonian Positron Emission Tomography*".

The next PG meeting will take place on Wednesday, April 12th, at 14:00. It will not be followed by a seminar.

Minutes taken by VM