

## **New developments in the ISAC-II experimental hall:**

This meeting was focused on new developments in the ISAC-II experimental hall including: 1) requirements and status of EMMA, 2) the requirements and status of IRIS, 3) the status of SEBT1 and HERACLES, 4) space requirements for TIGRESS and DESCANT and 5) new requirements from the Accelerator Division for cryomodule assembly and testing for VECC and the e-linac. Prior to the meeting a drawing showing the existing and planned layout of all beamlines and experimental facilities in the ISAC-II hall (ISK0116U rev36\_stua 27Sep2010.pdf ) was prepared by Stu Austin. This first meeting was a general discussion of the requirements of each group with limited discussion on possible solutions.

### EMMA:

- Barry Davids gave an update on the status of EMMA and the plans to begin the installation of the support structure (see EMMA\_status\_bd\_27Sep2010.pdf for details). The installation of beamline SEBT3B has begun and will be completed in fiscal 2011. The support structure frame for EMMA has been fabricated and additional space must be cleared to allow this frame to be installed in the experimental hall. A preliminary layout of the electrical services (i.e. power supplies, cable trays etc) was also presented. Considerable discussion of this layout followed. It is clear that revisions will be required to meet the needs of all users of the experimental hall. (ACTION: BD to work with FM and others)

### IRIS:

- Robert Henderson gave an update on the conceptual design of the Scattering chamber and Ionization chamber for IRIS (see IRIS\_status\_rh\_27Sep2010.pdf for details). A floor plan showing the proposed layout of IRIS at SEBT2 is given in figure ISK0116U\_rev37\_stua Model(2).pdf. Since SEBT2 must also serve as the General Purpose Station for ISAC-II it is necessary to determine that the IRIS plans are compatible with this requirement. (ACTION RK to work with FM and others)

### Status of SEBT1 and HERACLES:

- Andy Hurst reported that SEBT1 Magnets and diagnostics are installed. Things that still need to be done include: connecting the cabling for magnet flow and over-temperature interlocks, connecting the air lines to vacuum and diagnostics devices, and some minor vacuum diagnostics and controls installations. Once the TUDA experiment is completed in late October, the chamber will be removed and the beamline prepared for commissioning in late November through to the beam dump after HERACLES.
- In the meantime the HERACLES installation will be completed in preparation for first tests with stable beam in early December.

Space requirements for TIGRESS and DESCANT:

- Greg Hackman and Randy Churchman estimate that the TIGRESS floor space needed for the storage of spares, auxiliary detectors, mounting machines, etc. and for the setup of experiments is ~ 30 m<sup>2</sup>. Storage of the 72 DESCANT detectors and shells will require an additional 12 m<sup>2</sup>. (ACTION GH and RC to work with FC and others on a solution for DESCANT storage)

Accelerator Division Requirements for cryomodule assembly and testing:

- Marco Marchetto gave a brief presentation ( see SRF/CM\_mm\_27Sep2010.pdf) on the space requirements of the Accelerator Division in the ISAC-II experimental hall for SRF activities and ICM(Injector CryoModule) and ACM(Accelerator CryoModule) assembly. These needs are in direct conflict with the permanent floor space required by EMMA. In the short term (~1 year) the space required should not be an issue. However, a long term solution to this problem needs to be found. (ACTION: MM and BL to work with FM, BD and others).