Minutes from Beam Development Strategy Meeting 4th May 2017

Present: Chris Ruiz (secretary, chair), Oliver Kester, John Behr, Jens Lassen, Iris Dillman, Adam Garnsworthy, Alex Gottberg, Barry Davids, Friedhelm Ames, Marco Marchetto

Topic: Reduced Operation in Fall Schedule to accelerate ARIEL schedule

- 10 weeks of potential schedule would be available from Oct 11th - Dec 20th. We should consider the effect of running a shorter schedule of 6,7 or 8 weeks. What would those extra weeks gain the ARIEL project?

- Running simple targets and ion sources was also a requested consideration. Simple in the this respect means Ta or SiC for target material, i.e. no UCx because of overhead in manufacture. **It is acknowledged that this is the most in-demand target, but consideration would be given to this in later schedules.**

- Simple ion sources are SIS (with some limited TRILIS operation), and FEBIAD. IGLIS is too resource intensive.

- Can run HP or LP targets. LP better at end if we run full schedule, but if we stop schedule early, HP could be run.

- **Experiments database shows 182 RIB shifts of experiments that can run with these target/source types.** [Note: CR corrected this from previous erroneous number]

- Development target desired (nano-structured SiC) - however not certain if this will be ready for the Fall schedule. Could also be done in Spring.

- If run SiC, should it be run with SIS or FEBIAD? -> It doesn't make too much difference in effort -> can be dictated by experimental demand.

- Ta target usually has intensive demand for laser ionization -> Likely to be many requests. However, intensive only if many elements requested -> favour longer experiments with less elements?

- Risk is slightly higher scheduling FEBIAD as want to avoid firefight mode. However there is easier beam tuning. Therefore FEBIAD is ok.

- If stop schedule 3 weeks early, what would be done with those 3 weeks? —> 3 weeks alone won't make such a difference, **but relaxed operation effort for duration of schedule, then 3 weeks, allows better preparation for the work**

in those weeks. Acc Div would prefer stopping early in December rather than starting late in November. Only ARIEL projects will be allowed to be worked on in this 3 weeks time if used.

- beta-nmr will probably have 1 long run, as is usual in Fall schedule. This will not require much resources.
- Other facilities that can use lithium beams are MTV and EMMA.
- Running simple targets, long runs, few elements will free up operations & laser resources, plus free up 3 weeks for dedication to ARIEL projects.
- **The “no Fall schedule" option was rejected by users based on proximity** - consideration could be given to that option in future? Large amount of advance warning needed.
- Not running UCx will increase demand in Spring schedule…so fast method of making UCx would be greatly beneficial. Standard fabrication means maximum 3 UCx per Spring schedule.
- ARIEL projects could use technician's help. The 3 ISAC techs are always busy. However, could consider requesting assistance from techs from users at universities?

OK and JD now have information required to make schedule decision. Next week require to get out information to users in call for requests. In this, we will outline the boundary conditions that are decided upon, and allow users to submit requests based on those.