

Closing remarks

Step IV:

- The elements are coming together:
 - **MICE Muon Beam:**
 - Continued maintenance and incremental upgrade
 - Prepare to install new-style, “S-series” target
 - **Tracker module:**
 - **Spectrometer solenoids:**
 - One at RAL, the second soon to be mapped and shipped;
 - Great step forward ...
 - » Welcome pressure on RAL integration team; tracker team, FC team ... and all of us to get Step IV ready
 - **Absorber/focus-coil module:**
 - Issues with both modules, but, some grounds for optimism that FC#1 will support a pukka experimental programme
 - **S/w&C:**
 - Some concern re resourcing for S/w&C and absence of resource-loaded schedule is now a concern
 - **Physics:**
 - Clear progress in preparing the tools, techniques and measurement plans
 - Staffing issues a concern
 - Analysis of programme at reduced FC current critical:
 - We need to be in a position to present well digested results at the reviews (end Apr14)
- I believe issues can be addressed if we continue to pull together ...
 - But, clearly essential to stay completely focused on the prize!

Putative field-off run Summer 2014:

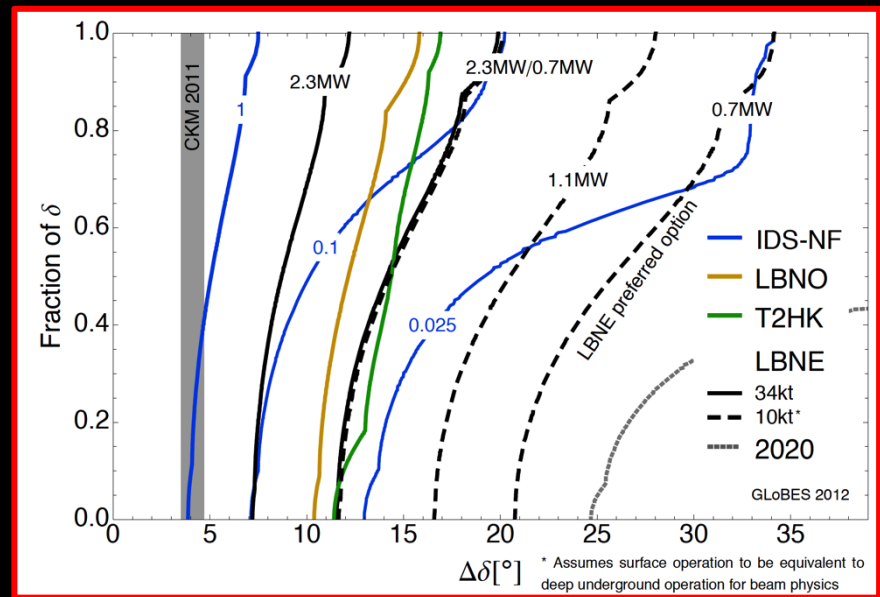
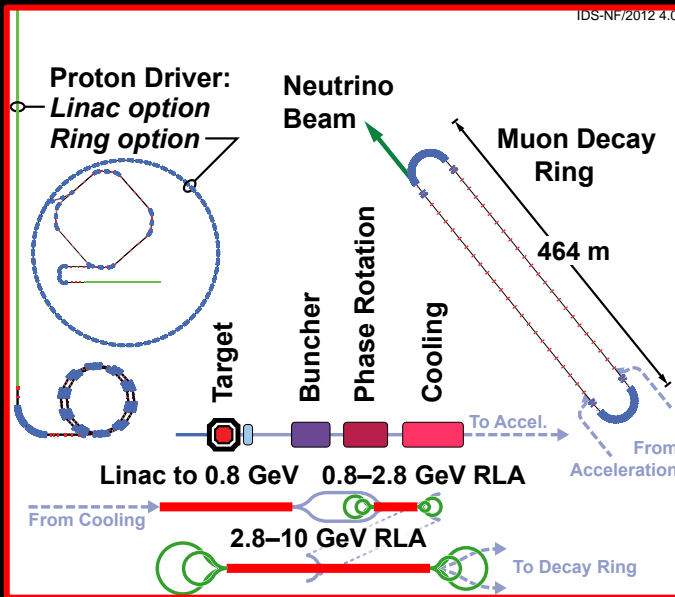
- Have been carrying the possibility of carrying out a field-off run in the last ISIS User run of 2014 (Jul/Aug)
 - Estimates of likelihood of carrying this out vary, but, none are very large
 - Benefits would be substantial
- Priority is clear: Step IV
 - Field-off run can only happen if it does not impact Step IV
- Presently, schedule shows delivery of PRY is in direct conflict with the proposed run
 - It has been argued that:
 - It may be possible to advance the procurement such that the PRY does not interfere with the run; and that
 - Within the short term (and certainly before the end of Mar14) it will be clear whether this *HAS NOT* been achieved
- The CB agreed the following:
 - Decision point 31Mar14:
 - If it has not been possible to advance the procurement such that the probability that the run can go ahead is sufficient to give reasonable confidence that the run can go ahead;
 - Then the run will be cancelled

Step VI:

- **Good progress on the production of the components:**
 - **Coupling coil being trained at FNAL;**
 - **CC cryostat progressing towards completion;**
 - **Single-cavity fit-up converging to completion;**
 - **RF-power amplifier commissioned in MICE Hall, details of implementation in the MICE Hall (including consideration of LLRF etc advancing)**
- **Progress on analysis and instrumentation:**
 - **Discussion of schemes by which muon can be “phased” wrt RF in the cavities is advancing**
 - **Analysis of benefits of Step VI re-ignited:**
 - **An important analysis; we need to be much more crisp than we were yesterday!**

MICE and muon accelerators for PP:

- Muon accelerators have the potential to:
 - Make definitive measurements of neutrino oscillations at the Neutrino Factory;
 - Provide multi-TeV lepton-antilepton collisions at the Muon Collider
- Incremental development of the Neutrino Factory programme offers exquisite sensitivity and precision:



- MICE:
 - Proof of principle of ionization cooling;
 - A critical enabling technique
 - We can deliver a key part of the capability required to deliver a new technique for particle physics

Some deadlines:

- Next round of reviews:
 - RLSR:
 - 30Apr14
 - MPB:
 - 31Apr14
 - FAC:
 - 01May14
 - Papers due:
 - 16Apr14
- Lots of good progress to present;
- Need to have:
 - First iteration of results on Step IV with reduced FC current;
 - Decision tree
 - Performance analysis
 - Steps towards the Step V/VI decision point in 2016

Academic training for MICE ...



- Two excellent talks to kick off the series from Bob ...

And finally ...

- Thanks once again to the local organisers:
 - Sam Vannecek
 - Jan Hennessey
 - Derun Li

- Thanks for coming and contributing;
 - “Safe travels” ... and ...
 - Stay focused on the prize!