KURRI FFAG MEETING 4/9/2014

Google+ hangout meeting

Attendees:

KURRI, RAL

Minutes

- 1. Liu Shiang presented a measurement to observe and match the beam vertically
 - profile will oscillate at one azimuthal position if mismatched
 - fluorescent monitor installed with camera, image analysis described in presentation
 - S. Machida noted that the profiles are taken after one turn only
- 2. Uesugi-san presented a measurement of dispersion at the slit using 'real' momentum method rather than equivalent momentum method.
 - To cross-check they did a measurement changing the actual energy by adjusting the linac tank field, this produced a 100ps TOF difference, $delp/p = \pm 3\%$
 - Dispersion at the slit measured to be 0.2-0.3m which is consistent with Ludovic's previous method, but not consistent with the theoretical value of 0.4 from SAD
 - Field strength of Quad magnet current -> field conversion is a constant, it was suggested that this is measured again. Also has some implications for the assumed beta-function.
 - ACTION TO DO: change the calibration constant by a few % in the simulation and see how the model result changes. It could produce the difference we observe as we are in a high eta' region so eta varies rapidly.
- 3. Ishi-san gave us an update on the machine:
 - the unused iron steering magnet that was in the ionBeta line has been removed
 - a radial probe has been removed
 - Trying to set the machine up so the corrector can be raised for operation without losing beam
 - Plans to measure the COD & tune again now this work has been done
 - The machine schedule was circulated, a tentative idea of experiments in mid-November was discussed, and sometime between Jan-March 2015 also (perhaps concentrating on new RF cavity?)
- 4. David presented his work on the effect of dispersion on COD measurement
 - this is ongoing work to try to determine whether the variation of dispersion we observe between the 3 probes is due to the COD. It looks likely this is the case, but it is not yet finalised.

- 5. Towards the first paper, a list of people who can contribute to different sections is being put together. Ishi-san and Suzie are both presenting talks at FFAG'14, and Uesugi-san will also discuss the RF.
 - ACTION TO DO: please let Suzie know which section of the paper you will contribute to. At the next meeting she will try to produce a list of names for different items. Don't worry, this will probably change over time.
- 6. The next meeting will be organised by doodle poll after the FFAG'14 workshop in early-mid October.