

KURRI FFLAG MEETING 28/04/2016
Google+ hangout meeting

Attendees:

S. Sheehy, D. Kelliher, S Machida, C. Prior, C. Plostinar - RAL
M Haj Tahar, F Meot - BNL
Y Ishi, T Uesugi, Y. Mori - KURRI
H. Okuno – Riken

Minutes:

1. Ishi-san gave an update on the machine status.
 - RF measurement has been done.
 - Identify several resonance modes.
 - Also checked DTL1 – no contamination found.
 - Plan to measure beam profile from the ion source before RFQ installation. Then power testing before rotation, after that rotate and re-insert.
2. Malek showed one slide
 - showing horizontal emittance growth with 3D TOSCA field, but not with 2D TOSCA field.
 - With 4 times larger vertical emittance, horizontal emittance start growing, but not clear if it is the same peak as with 3D TOSCA.
3. Shinji gave a presentation of multipole measurement in field map.
 - Both 2D and 3D TOSCA field has huge multipole coefficients for the order of more than 4.
 - It is not clear if this has an impact on the tracking, though.
 - Mori-san will prepare 1 mm TOSCA field map (only 2D) and do the same multipole analysis if there is any improvement.
4. Malek propose correction scheme.
 - Introducing the opposite effects (k value of F and D in every second cell), the overall tune becomes flat.
 - Shinji asked if it is better than the scheme with all magnets corrected. It is cheaper, that is true.
 - David asked effects of COD on tune.
5. Mori-san showed slides on correction simulation.
 - Slides were from Motohashi-san from JPS meeting last month
 - On slide 12 can see the proposal to add 7 pole face winding coils in the magnets.
 - In simulation, tune becomes flat.
 - Coils cannot be installed over the whole aperture because of hardware restrictions.
 - Mori-san noted that correction is strongest from the D magnet (ie. it is essential to 'fix' the tune). In the KURRI machine, it would only be possible to put correction on the D (a student at KURRI will study this).
6. Discussed the 6 weeks interval of the meeting.
 - Next meeting will be Thursday 9 June.

