KURRI FFAG MEETING 17/7/2014

Google+ hangout meeting

Attendees:

KURRI, RAL, Imperial

Minutes

1. Suzie is still preparing the first draft version of the paper from recent experiments and will circulate it soon.
2. Ishi-san presented slides on the tune measurement throughout acceleration which was made possible with Sakamoto-san's movable monitor and the movable RF 'shaker' device. It took a couple of days to take all the measurements.
    a. There are a number of loss points in the acceleration cycle, some of which seem to be at identifiable resonances. However, other resonance lines appear to be crossed without loss. This may be because the crossing speed is fast, but we are not 100% sure.
    b. Ishi-san did tracking simulations to compare and the shape of the x-y tune diagram is different from the experimental version.
    c. During the measurements there was a piece of iron shielding to shield the main magnet field from the corrector magnets. Ishi-san mentioned this may be affecting the tune (?) so one day perhaps we should try it without this or to change the working point and try again.
    d. S. Machida and J. B. Lagrange suggest as a first step to try to 'zoom in' to some of the regions where we observe loss and take some finer points of how the tune varies in these regions.
3. We also discussed the current status of the dispersion measurements as previously there was a rather large discrepancy between the SAD simulation and injection line dispersion measurement. From simulation we believe we are measuring in a high eta' region so a fairly small error in field setting of the injection line magnets could lead to a large discrepancy in the measurement of eta.
    a. It would be nice to show this in simulation to confirm our understanding in detail.
    b. Another possibility is to measure the dispersion using a real change in energy by degrading the beam energy with a thin foil.
4. The FFAG workshop was briefly discussed. Currently the plan is for Ishi-san to give a KURRI FFAG overview (including ADSR experiments) and Suzie will give a more detailed talk on the results of the experiments as part of the collaboration.
5. The next meeting should be held on 4th September 13:00 UK time (9pm Japan time, 8am at BNL).