KURRI FFAG MEETING 18/12/2013

Google+ hangout meeting

Attendees:

- C. Prior
- S. Sheehy
- D. Kelliher
- S. Machida
- C. Rogers
- Y. Ishi
- T. Uesugi
- Y. Mori
- J. B. Lagrange

Minutes

1. Simulation and analysis updates:

DK presented an update on data analysis using integrated bunch area. Slides are available on the website¹

He has calculated the momentum spread dp to be 1.5 to 2% with some assumptions. This seems very large. (AccSys specifies 30keV energy spread for the linac)

CR reported he was working on some monte carlo simulations but these weren't ready to present yet.

Questions arising:

- CR: is the integral under the peak really a good measure of the bunch charge?
- SM: What is the linac frequency? Is it really 200MHz?
- DK: What is the 'ringing' or small peaks in the tail end of the spectrum in the first 3-4 turns?
- CR: Could there be an asymmetric momentum distribution from the linac?

Actions arising:

- 1. YI: Ishi-san to present in the future (next meeting?) some previous work on a simple model of the bunch monitor using AC coupling with time constant.
- 2. DK & CR: compare distributions to expected/simulated distributions from foil scattering/energy loss
- 3. SS: to send DK data files corresponding to data with no vertical offset without the probe in in case there is a large vertical loss in the files being looked at.

¹ http://hadron.kek.jp/FFAG/colabo/index.htm

2. Experimental plans:

- There are plans to measure the momentum spread in January for M.Takabatake's thesis with a flying wire.
- No other changes that should affect the run in March. The date of the power outage is still unknown and travel plans can be firmed up when this becomes known.

3. Any other busness:

Next meeting will be on 16th January at the same time (1pm UK time)