KURRI FFAG MEETING 15/1/2015
Google+ hangout meeting

Attendees:
Y. Ishi, T. Uesugi, KURRI
D. Kelliher, S. Machida, C. Rogers, C. Prior, S. Sheehy, RAL
M. Haj Tahar, S. Berg, F. Meot, BNL
D. Bruton, Huddersfield

Minutes:

1. Shinji made a presentation on progress using 'SCODE' for benchmarking and specific KURRI-FFAG work. SCODE can now use TOSCA field maps.
    a. Good agreement with ZGOUBI for the tunes except for the last few points – we are still understanding this. Comment from Ishi-san that the closed orbit itself is very close to the edge of the good field region and the tune may be sensitive to tracking amplitudes used for the calculation.
    b. Shinji has added this to the github: https://github.com/fixed-field-accelerator-simulation
    c. The more specific KURRI-FFAG work he looked at the fact k is not constant and there is a large COD. His method to calculate rf programme from k result is very similar to Uesugi-san's method, and both point to the fact that we need to experimentally figure out why we have improved transmission with variable k rf programme. He also found the COD shifts the tune footprint but doesn't change its shape. The experimental tune footprint is not explained by single kick COD model.

2. Malek presented a comprehensive update on k value from the field maps and implementation of a more detailed analytic model in ZGOUBI with a k that varies with radius. He also presented a theoretical model to estimate the tunes when the k values are variable and different in each magnet. See his slides for more detail.

3. The experimental schedule was discussed, next experiments are scheduled 23/2/2015-13/3/2015

4. Next meeting will be a little earlier than normal to help with experiment planning, on 2/2/2015 at the usual time. Please let Suzie know if there is any problem with this date.