Minutes of KURRI-FFAG collaboration meeting (RAL internal) by SM
11:00 – 12:30 BST, 7 October 2013

1. Suzie agreed to go to KURRI in November to do the followings.
    a. Investigate available diagnostics system in more details, especially its accuracy.
    b. Talk to them about their plan of beam experiment (multi-fish, etc) and our plan (high intensity trial, ionization cooling with space charge, etc) for further discussion later how we proceed.
    c. Find out the area where we could contribute to understand the machine, e.g. modeling and optimization of parameters.
    d. Something else I may have forgot.
2. Chris R. agreed to provide some results on the multiple scattering and energy loss at the foil with Geant4 model before Suzie goes to Japan.
    a. Thickness is 20 micro g/cm^2 at the moment, but could be 10 micro g/cm^2 later on.
    b. \beta function at the foil for the hardedge lattice is available. We may find more accurate \beta value based on the field map generated lattice.
3. We agreed to use OPAL to simulate ADSR-FFAG. Shinji will use/develop Simpsons for the ADSR-FFAG modeling as well to benchmark the code.
    a. OPAL training course is schedule soon. See the link under Today's meeting agenda.
4. RF model should be properly included in the OPAL. For ADSR-FFAG simulation, it has to have frequency modulation.
5. Our ultimate goal is to demonstration of high intensity operation in FFAG and ionization cooling with space charge effects.
    a. Although it seems hard to get the ultimate goal, we will start from a simple case, e.g. emittance growth of a coasting beam and go on.
    b. Fixed rf frequency operation of ADSR-FFAG may give some hints of ionization cooling with space charge effects.