

Hi Suzie

I wrote the skeleton of the FFAG simulation paper. I just thought it would help to finish writing in time (you are still the lead author!).

<https://www.overleaf.com/2457202sctcnx#/6404726/>

I think it would be good if we have the following input.

1. One paragraph description of codes (OPAL, Zgoubi, Earlietimes).
2. For low intensity benchmarking,
 - 2-a. transverse tune vs momentum (kinetic energy) table for comparison figure.
 - 2-b. transverse tune vs momentum (kinetic energy) table of measurement (for reproduction of figure).
 - 2-c. frequency vs momentum (kinetic energy) table.
 - 2-d. single particle trajectory table when particles are accelerated with $\phi=0$, 30 degree and $v=4$ kV.
3. For high intensity benchmarking,
Emittance evolution with space charge effects.

I put the simulation with foil scattering and energy loss as one of future plans.