

FFAG 2014 Workshop, ZGOUBI + OPAL PLANS

- We will have 2 half-days (Friday 26 Sept. afternoon, Saturday 27 Sept. morning) devoted to Zgoubi+OPAL : introduction/tutorial

- Andreas and FM organizers for this show, Malek collaborates. What follows still requires confirmation/discussion/preparation with Andreas.

- My plan : have an exercise/demo based on the following :

A field map of the complete 150MeV ring is produced using “FFAG” keyword in Zgoubi. Then this map is used in OPAL.

Details :

- show that OPAL and Zgoubi deliver identical space-charge free dynamics
- switch on space charge in OPAL and do some kind of demo / basic effects

- I plan a second example, similar, based on the existing PSI field map and already existing OPAL outcomes (e.g., separation of extracted turn).

- If time allows, we may be able to develop a 2D space charge model in Zgoubi and show comparisons, and possible interest as a first approach.