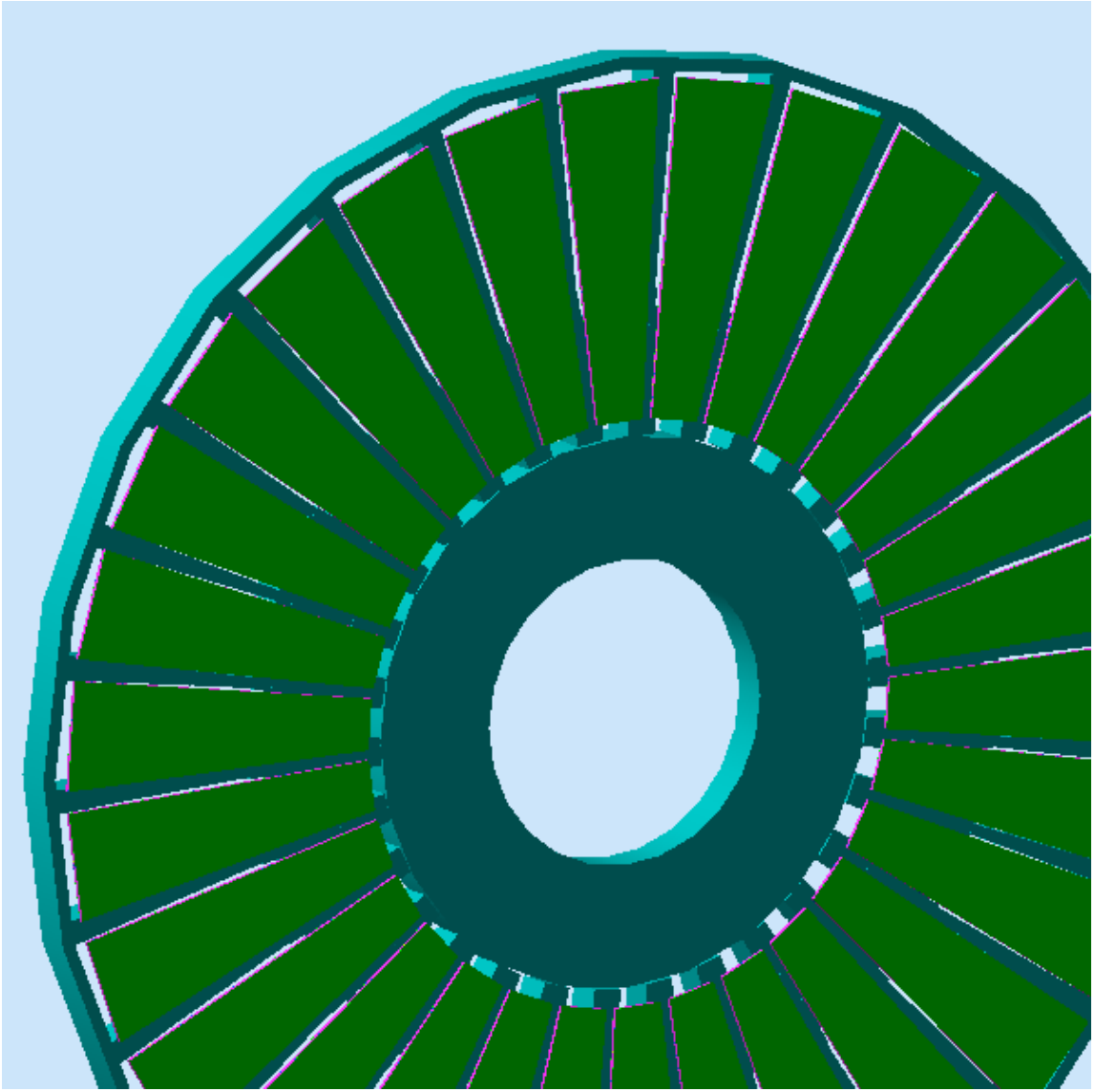
SoLID Simulation and Baffles

Seamus Riordan
University of Massachusetts, Amherst
sriordan@physics.umass.edu

March 22, 2013

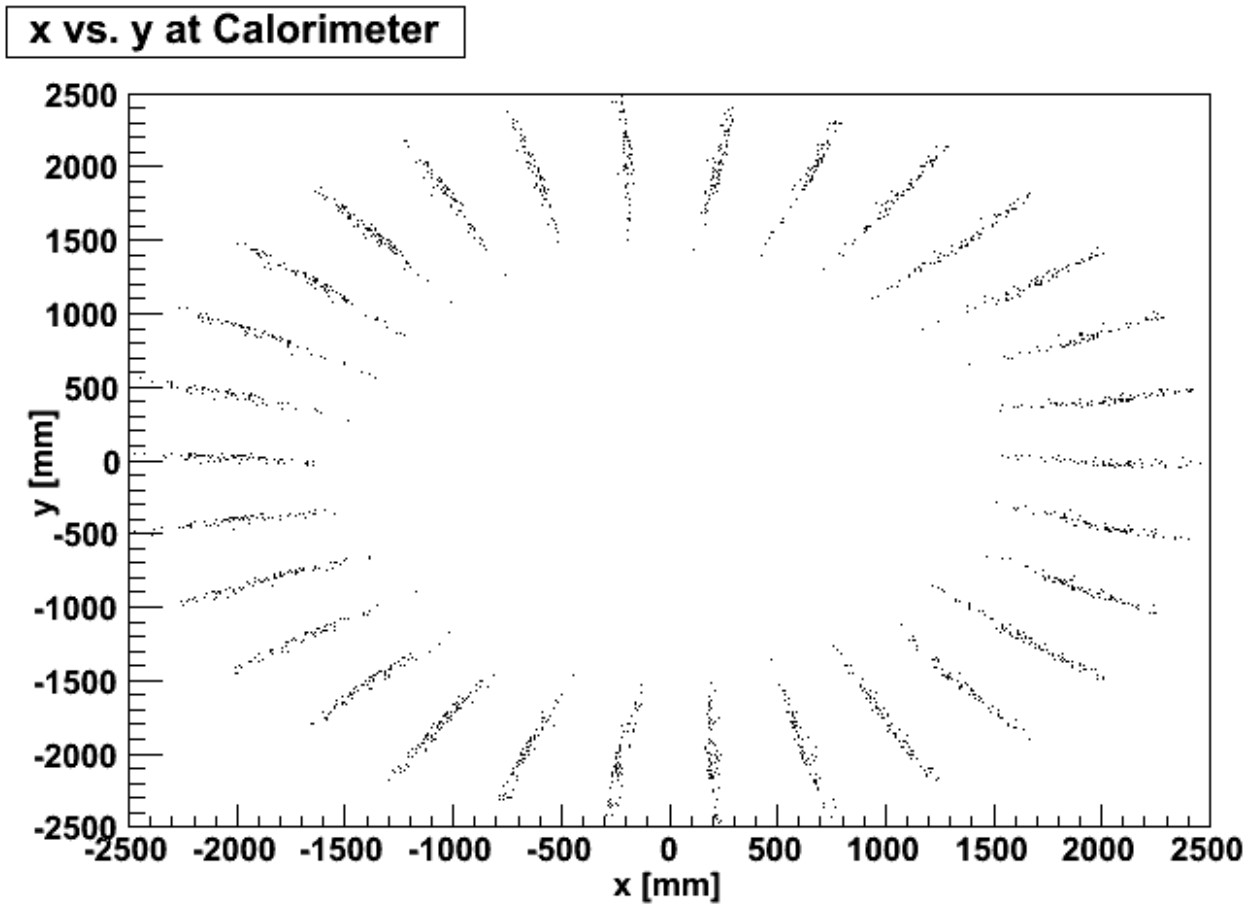
Outline

- Latest in Baffles
- Simulation
- To do list



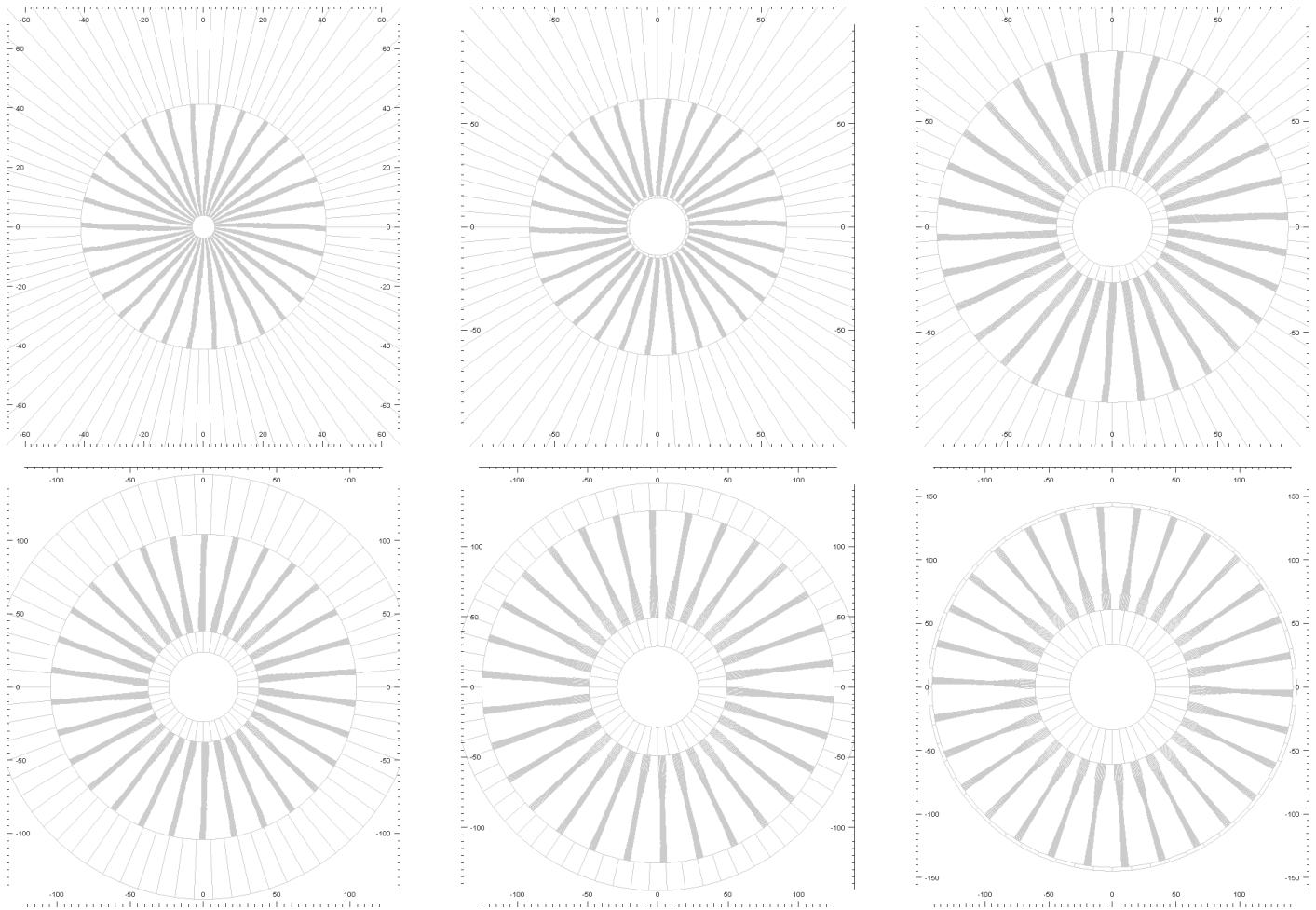
- Move all GEMs to behind baffles?

Photon Leak



- Still need to close off
- Acceptance loss becomes worse if GEMs are within baffles and photons need to be blocked

Baffle Profiles



- Paul Reimer working on pricing out for document

To Do List - Writing

- Baffles cost analysis needs to be done - working with Paul R.
- Touching up sections on recommendations from Bob
- Move G3 to G4 comparison to appendix?

To Do List - GEMC

- Generators
  - Radiative effects, need to enumerate needs
  - π asymmetry
  - F_2 inelastic for lower Q^2, resonance data - fits by Bosted on LH_2 and LD_2
    - Written, just need to be implemented
  - Hyperon decay
    - Working on with Konrad Aniol

To Do List - Detectors

- Supporting Ole with simulatino data/GEM digitization
- Cerenkov and calorimeter need similar framework developed
  - PID working group
- Charged flux through PMT glass in GEMC based on background rates
- Need to evaluate pileup/digitization in full background simulation
- Need to look at pion asymmetry effects in pion-sensitive detectors
- Low energy pions in Ecal and their response
- Response to electromagnetic background in calorimeter