SBS Monte Carlo Status

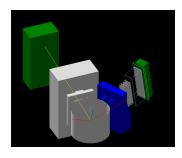
Seamus Riordan
University of Massachusetts, Amherst
sriordan@physics.umass.edu

July 31, 2013

Summary

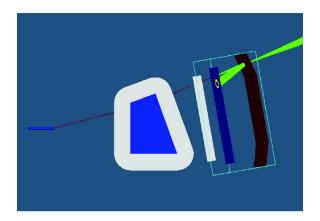
- Held meeting June 28 to assess MC situation
- Had discussion about three simulations that had been put together
- Overviewed available resources
- Alex and a summer student were going to focus some time

g4sbs



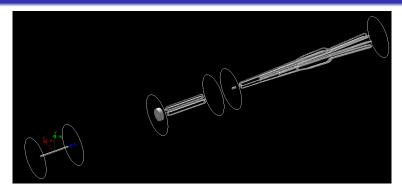
- Developed by SPR for Geant4
- Outputs directly to ROOT files
- Missing beam-line setup, geometry hardcoded
- Did a little work making it "production" quality - need to share
- Have functioning but non-public git repository
- IMO path of least resistance to getting background rates
- Alex and student were going to take a look
- Had some problems running on some lab machines looking at it now
- Was able to export geometry to GDML to other sims

SBS Cereknov



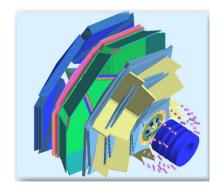
- Developed by Huan Yao for Cerkenov
- Includes very detailed, hard-coded geometry of Cerenkov and magnet setup
- Can be ported over into g4sbs

remoll



- Developed and actively used for Moller
- Uses GDML for geometry description
- Doesn't have "dynamic" experiment geometry
- Outputs directly to ROOT files
- Written to be distributed among many developers
- Successful in building/using in multiple environments

GEMC



- Developed for CLAS12 by CLAS collaboration
- Andrew will present more