Summary



A pilot project to kick-start physics-level modularization was launched with three goals:

- Study feasibility of removing dependency from G4 at the physics model level: DONE (SLAC)
- First pass optimization (code reviews). 13-25% speedup achieved:
 DONE (SLAC)
- Preliminary computing performance evaluation: Done (FNAL)
- Original Bertini code was already fairly optimized
- Vectorization of a sub-part of the Bertini model: TO BE DONE (FNAL)

GXBERT is a standalone hadronic model

 Provided as a open-source code on gitlab as a starting point for further studies