EM physics validation results for 11.3ref01

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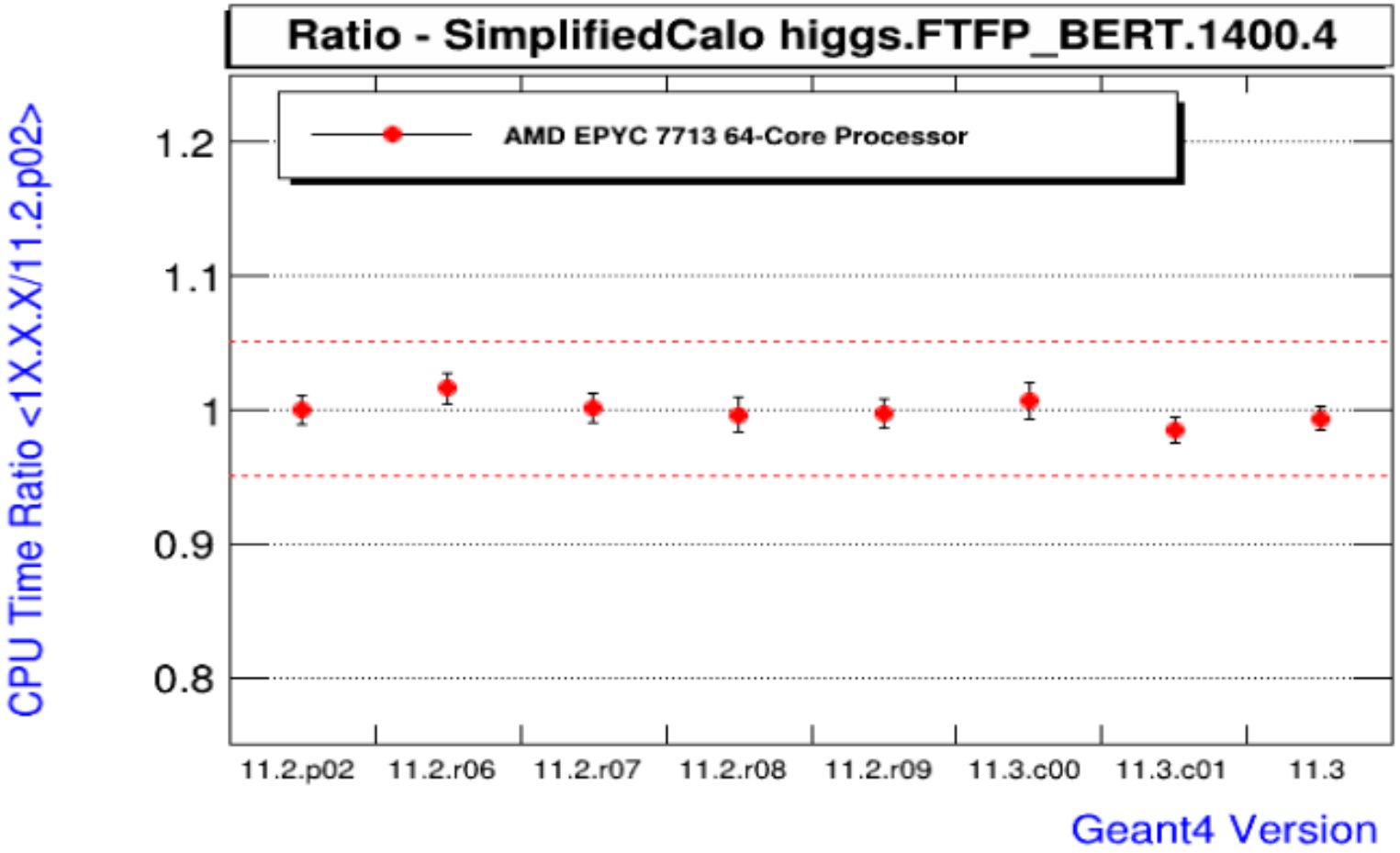
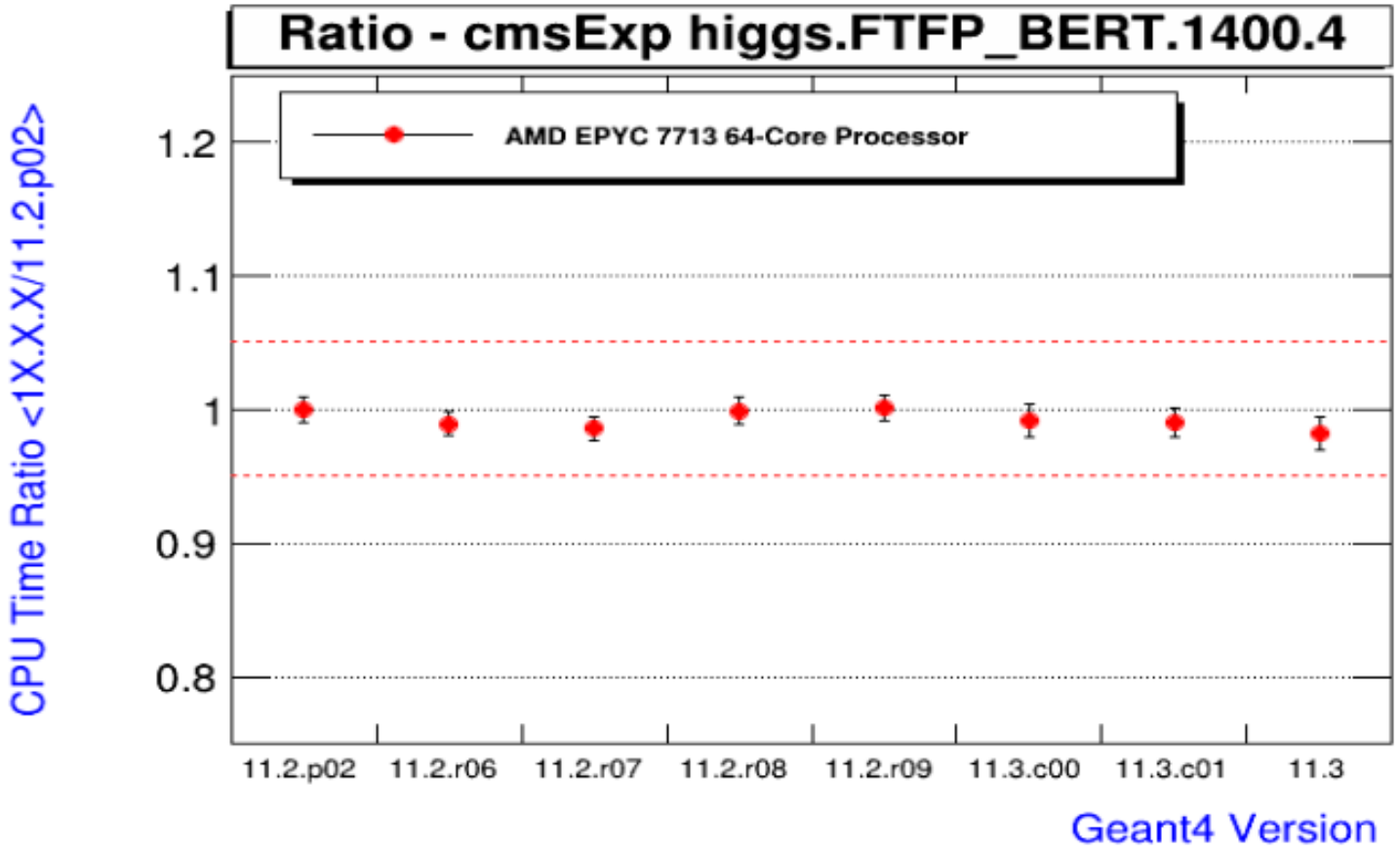
Modifications in EM libraries

- Roll back G4eBremsstrahlungRelModel to 11.2ref10
  - Issue with Celeritas software
  - We plan to improve this place differently
  - In 2025 work plan we will try to reduce number of static class members limiting ourself only by real static numbers and not data structures

FNAL Geant4 Profiling (J. Yarba)



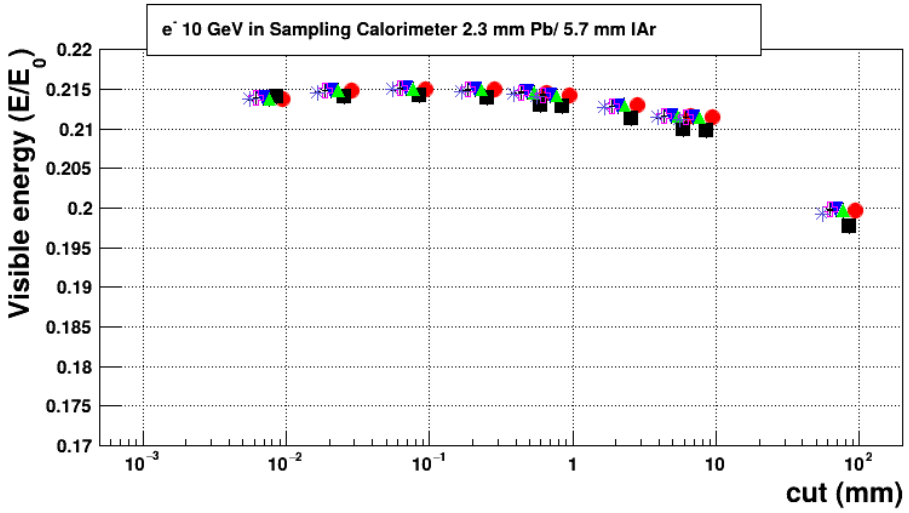
FNAL Geant4 Profiling (J. Yarba)

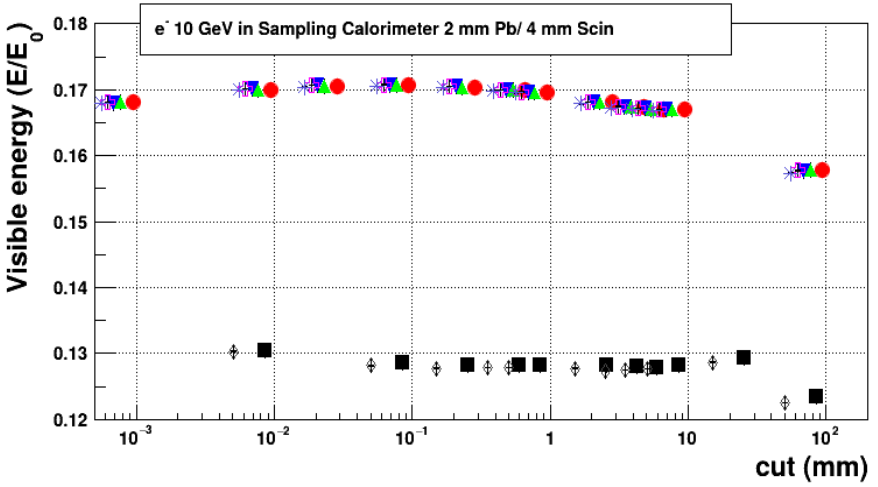


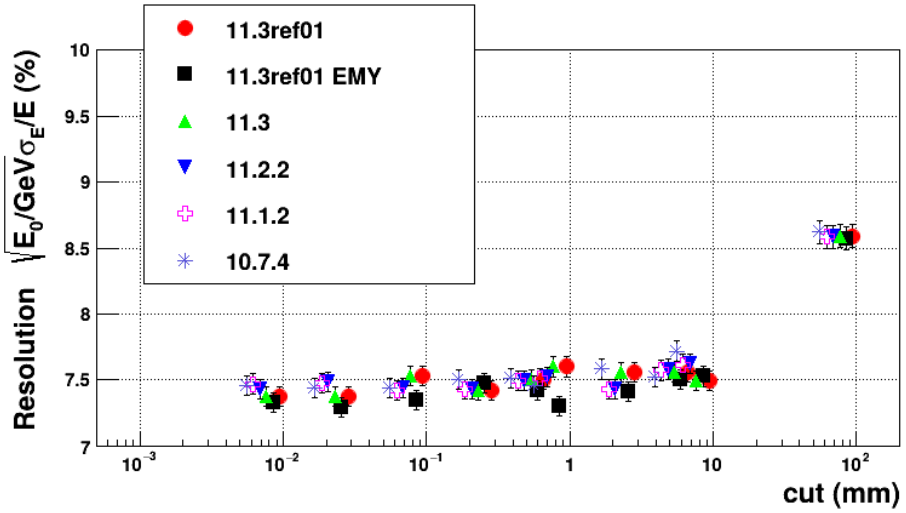
Test Results

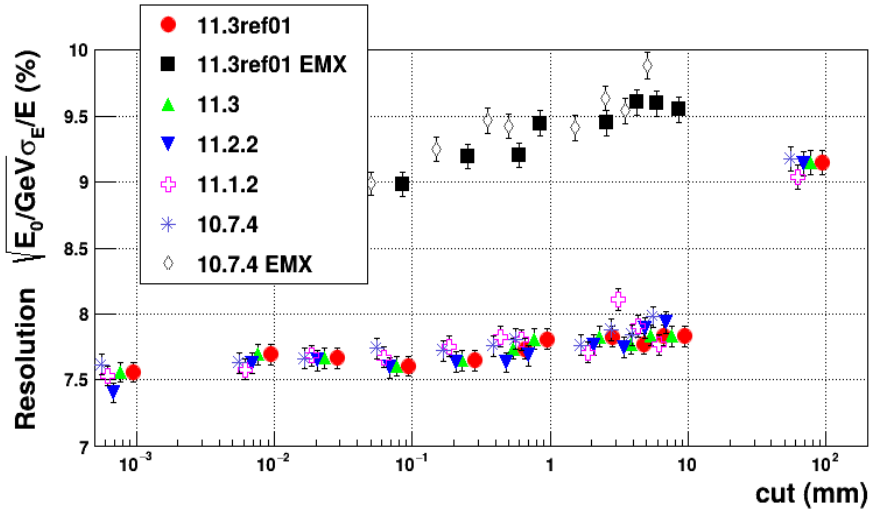
- Testing results will be available:
  - https://ivanchenko.web.cern.ch/electromagnetic/
- EM results are stable since 11.1.X

Simplified ATLAS and LHCb

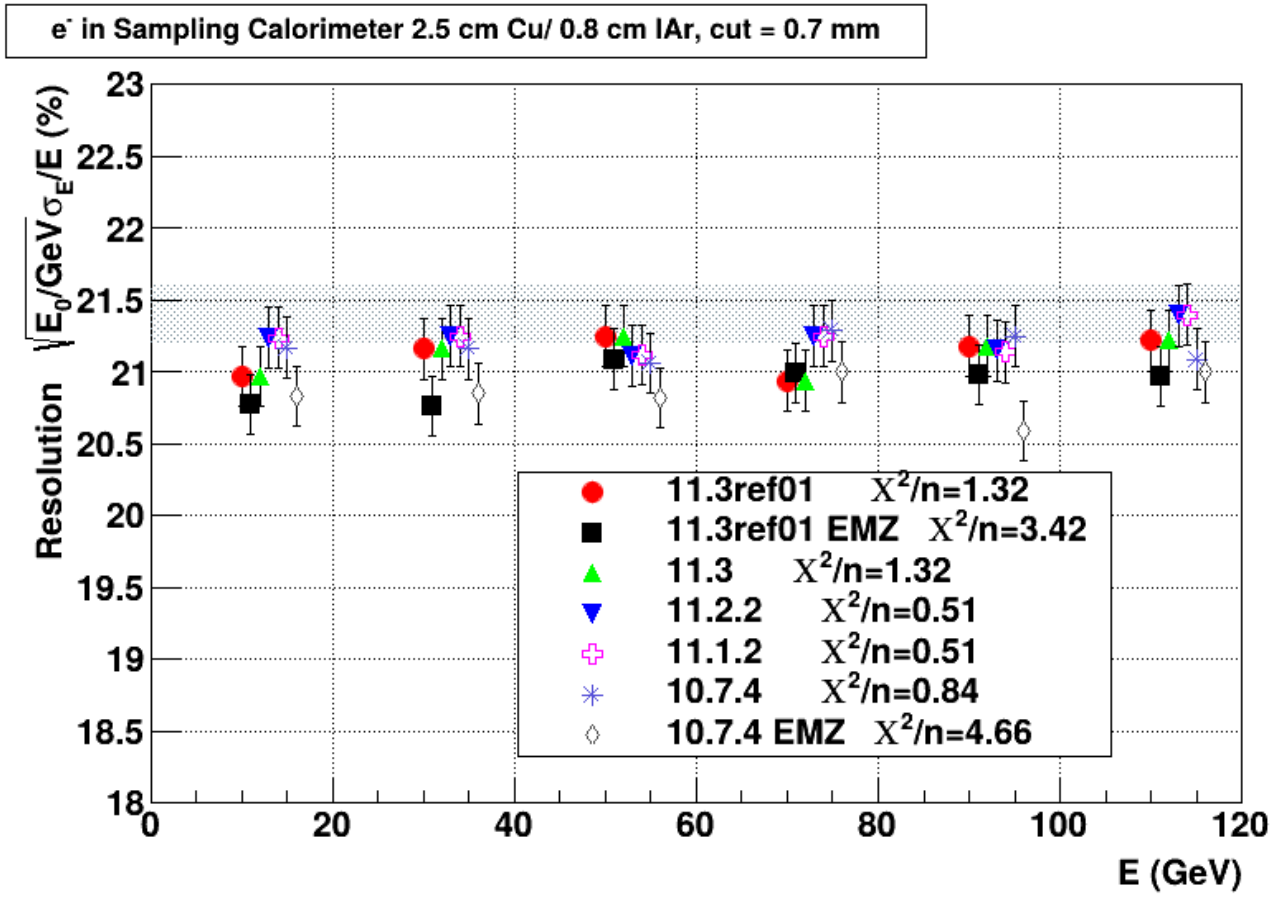




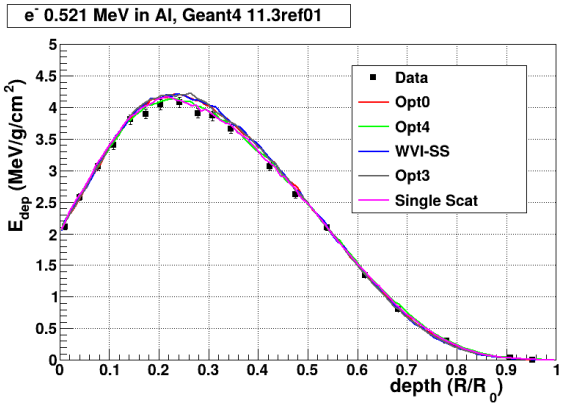


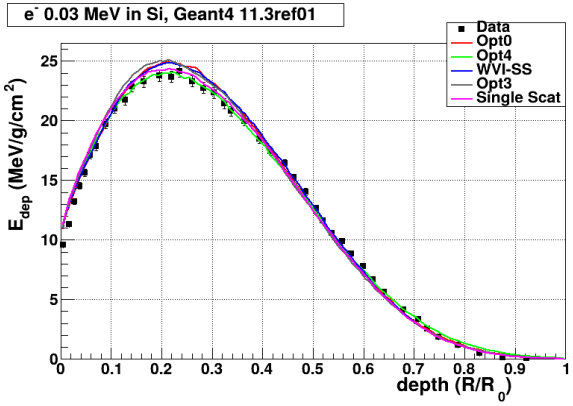


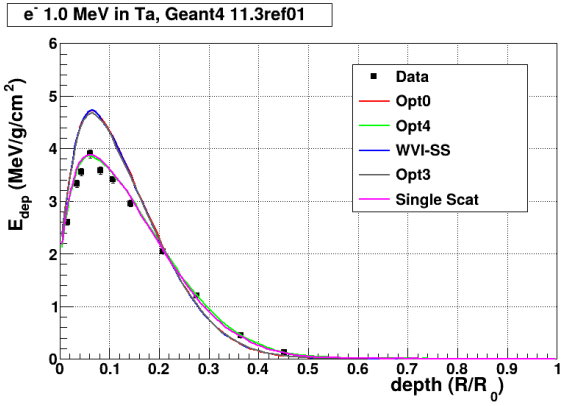
Simplified ATLAS HEC

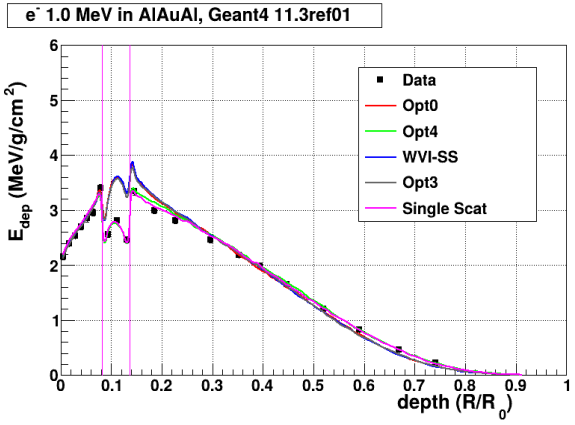


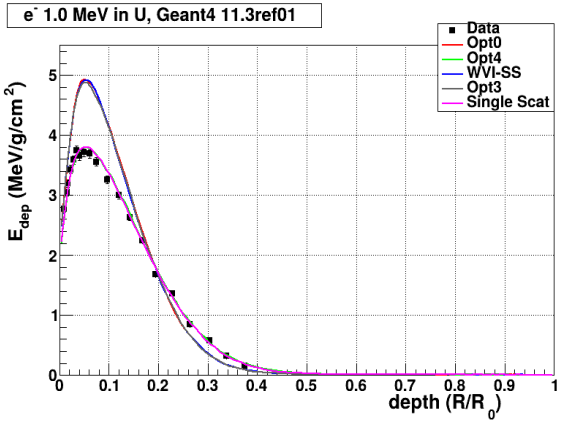
Electron energy profiles

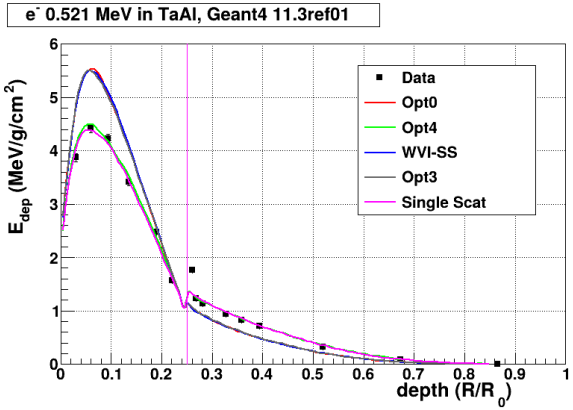












MuScat thin target test