Proposed BHCal Benchmarks

General Comments

– Run single particle events: π^-

– At midrapidity: $\theta \in (45°, 135°)$

– 4 energies: **2 GeV, 5 GeV, 10 GeV, 20 GeV**

Suite of Benchmark Plots

– Energies of hits, clusters, and sum of cluster energies

  ☞ Similar to top plot

– Reco. hit, cluster multiplicity

  ☞ Similar to bottom plot

– Multiplicity of hits per cluster

– Energy resolution:

  › $\Delta E = (E_{clust} - E_{par})/E_{par}$

  › Both 1D and 2D:

    ☞ ΔE vs. $\sum E_{BEMC}/(\sum E_{BEMC} + \sum E_{BHCal})$