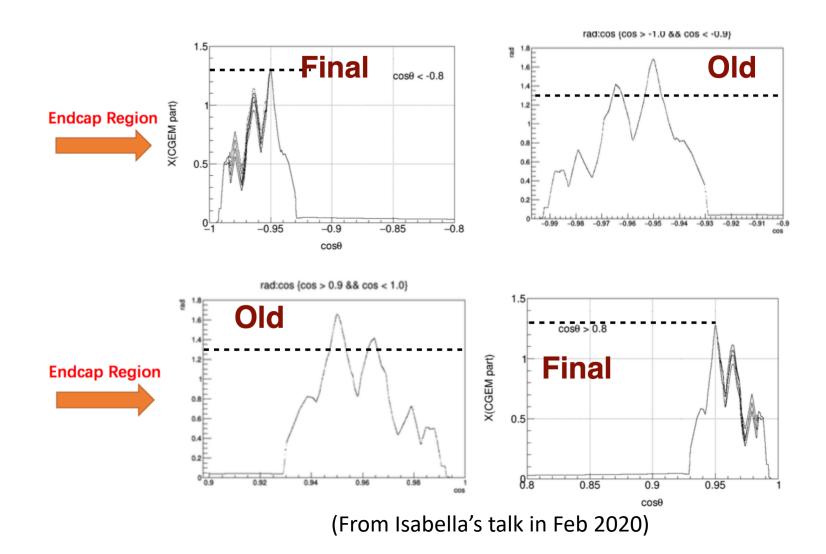
Effect on EMC from CGEM material (after passive elements update)

Chunxiu Liu

2020-06-18

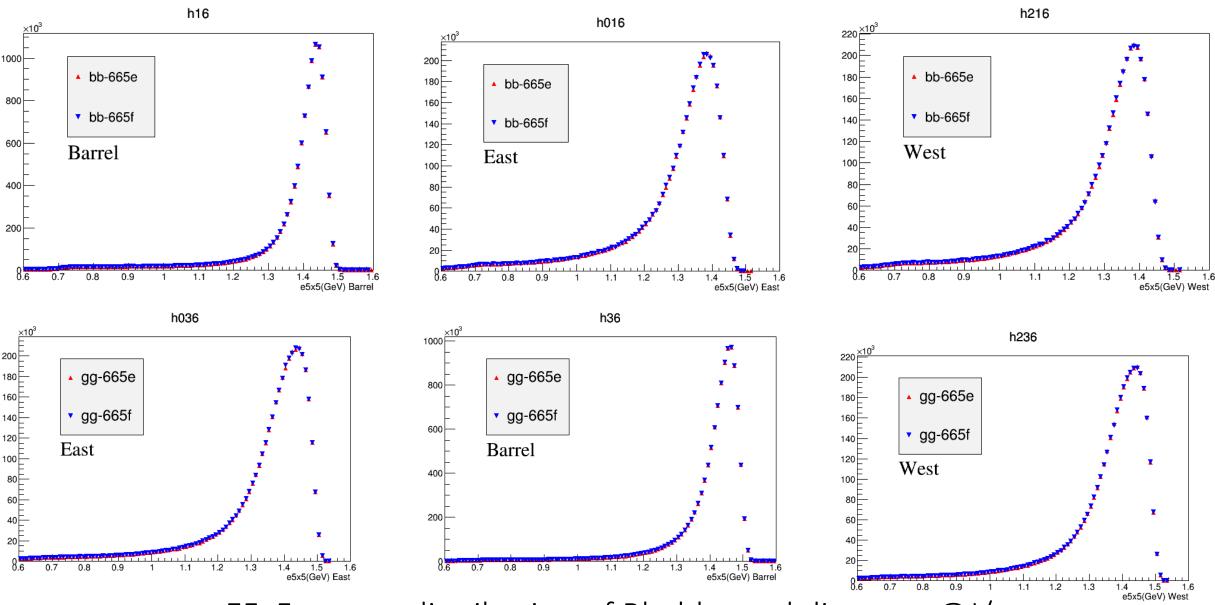
Passive elements update



Old in CgemBoss665e

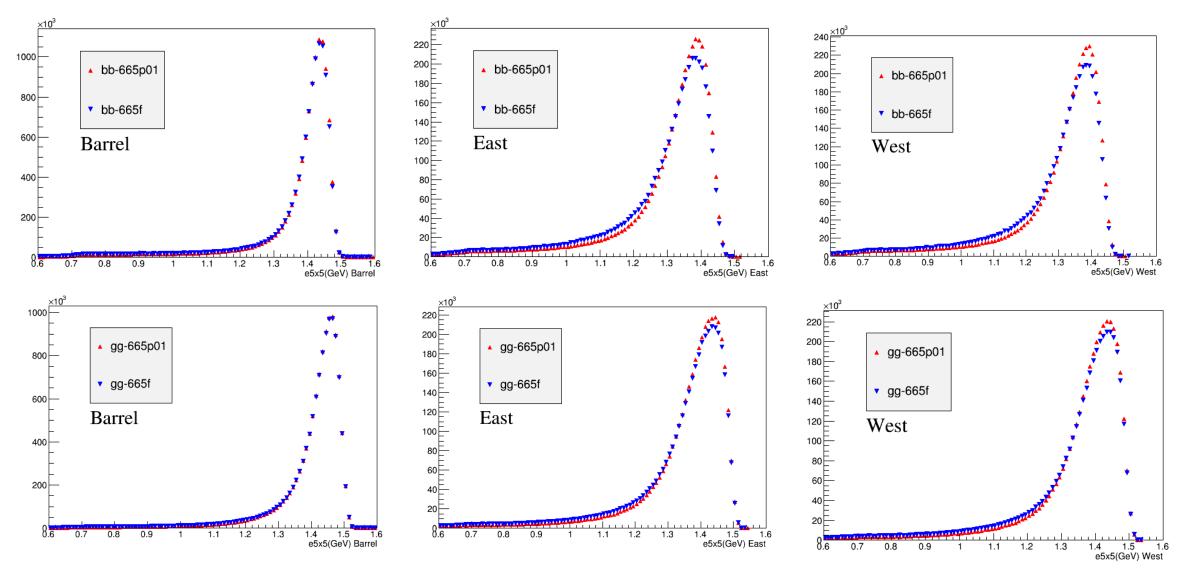
Final in CgemBoss665f

Comparison of E(5*5) with CGEMBOSS665e and CGEMBOSS665f



E5x5 energy distribution of Bhabha and digamma@J/ ψ

Comparison of E(5*5) with BOSS665p01 and CGEMBOSS665f



E5x5 energy distribution of Bhabha and digamma@J/ψ

E5x5 energy peak and resolution of Bhabha and digamma

| | E5x5 Peak (Bhabha @J/ψ) | | | E5x5 Peak (digamma@J/ψ) | | |
|--------|-------------------------|----------------------|--|-------------------------|----------------------|--|
| (GeV) | Peak _{665p01} | Peak _{665f} | Peak _{665f} - Peak _{665p01} | Peak _{665p01} | Peak _{665f} | Peak _{665f} - Peak _{665p01} |
| Barrel | 1.4417 | 1.4408 | -0.9MeV | 1.4616 | 1.4617 | 0.1MeV |
| East | 1.3905 | 1.3861 | -4.4MeV | 1.4386 | 1.4388 | 0.2MeV |
| West | 1.3906 | 1.3862 | -4.4MeV | 1.4390 | 1.4394 | 0.4MeV |

| | Resolution (Bhabha @J/ψ) | | | Resolution (digamma@J/ψ) | | |
|--------|--------------------------|-----------------|-------------------------------------|--------------------------|-----------------|-------------------------------------|
| (%) | σ _{665p01} | σ_{665f} | σ_{665f} - σ_{665p01} | σ _{665p01} | σ_{665f} | σ_{665f} - σ_{665p01} |
| Barrel | 2.55 | 2.58 | 0.03 | 2.86 | 2.87 | 0.01 |
| East | 4.3 | 4.66 | 0.36(8.4%) | 4.24 | 4.38 | 0.14(3.3%) |
| West | 4.24 | 4.58 | 0.34(8%) | 4.18 | 4.32 | 0.14(3.3%) |

Almost the same as before