Progress on Physics Calibration

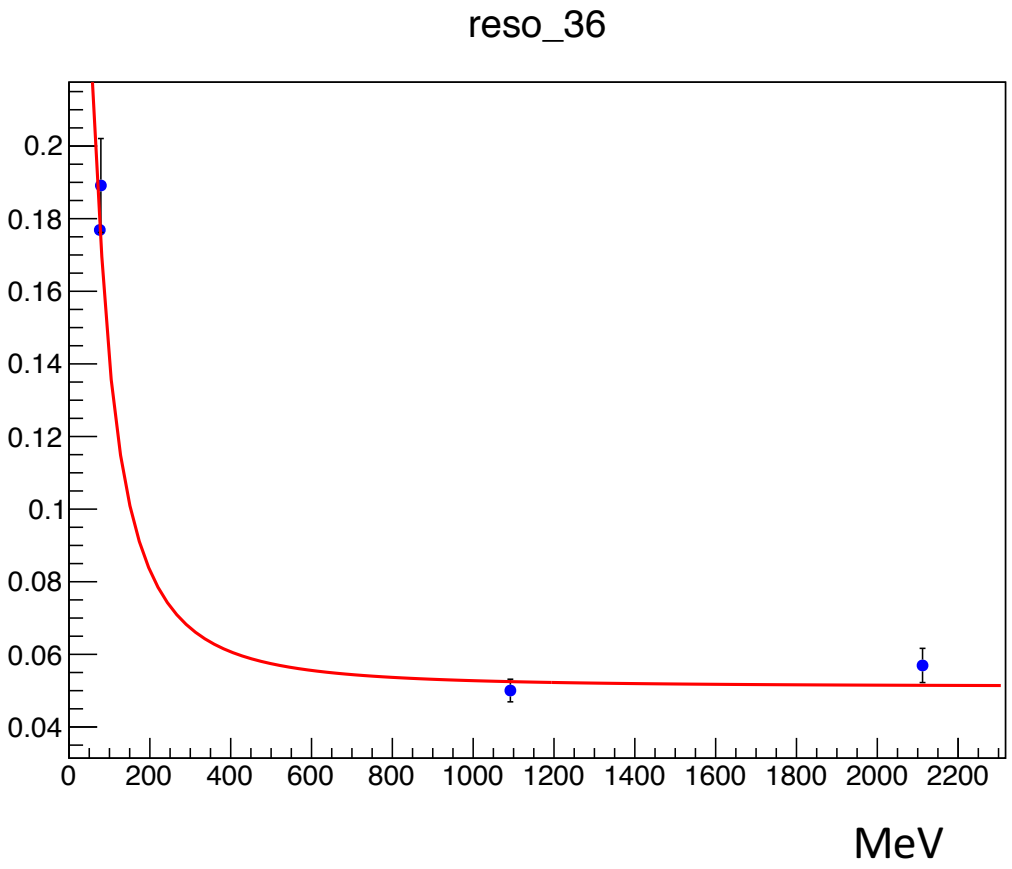
- Physics calibration finished on Wednesday
  - Include all data from 1GeV and 2GeV
  - Calibration constants distributed to the collaboration on Wednesday

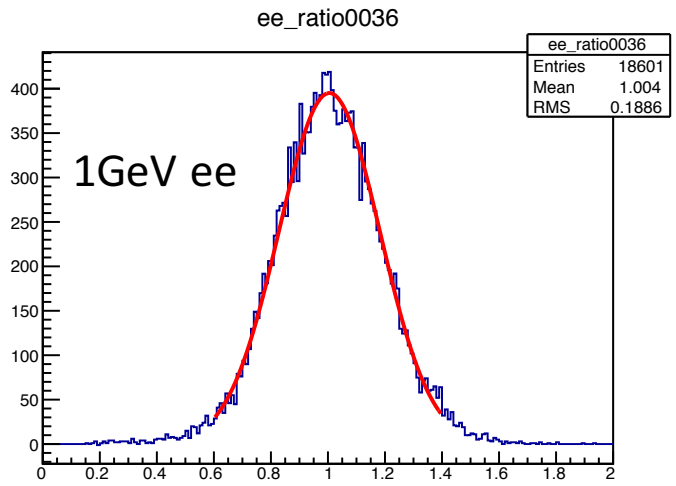
- Currently working on extracting the resolution curve for each module based on the 1GeV ep and ee peak, and 2GeV ep and ee peak
  - Fit the four data points using function $\frac{a}{\sqrt{E}} \oplus \frac{b}{E} \oplus c$

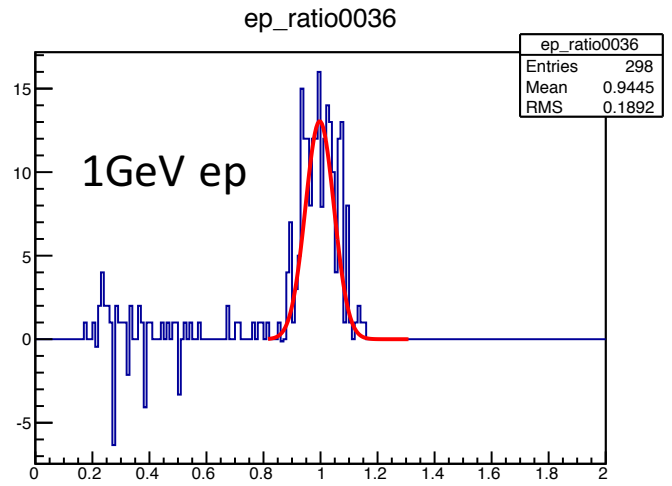
  - This should resolve the mismatch of ee elastic peak width in simulation and data
  - Hopefully will resolve the disagreement on ep elastic tail part as well

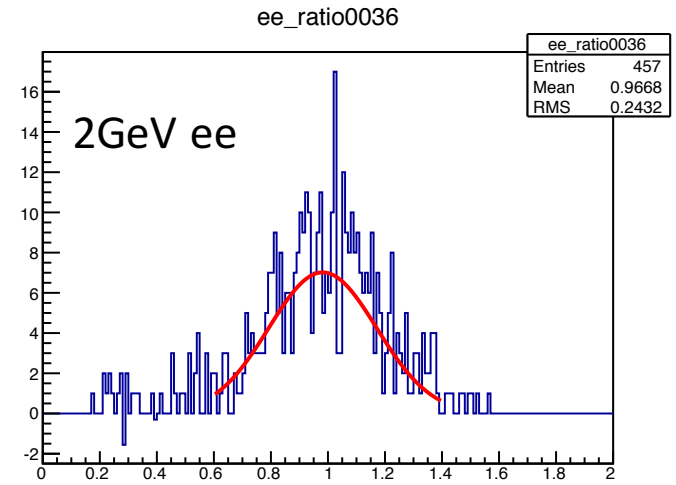
- Remaining issue:
  - A few modules have bad fits, need to fit them separately
  - Sometime modules have bad parameters, but curve very close to the data point

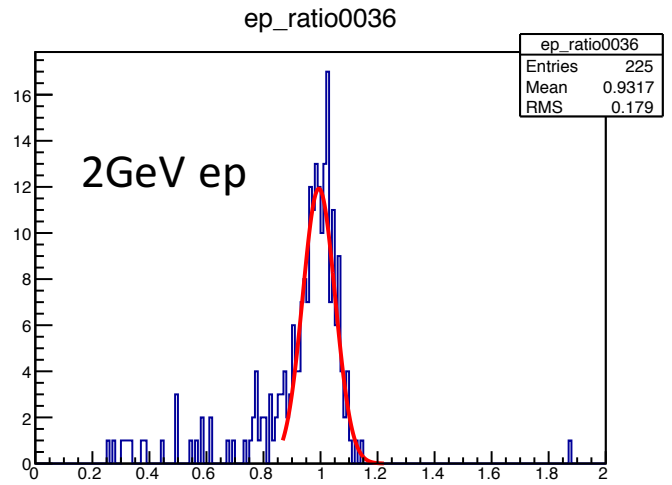
G36-–LG module near corner



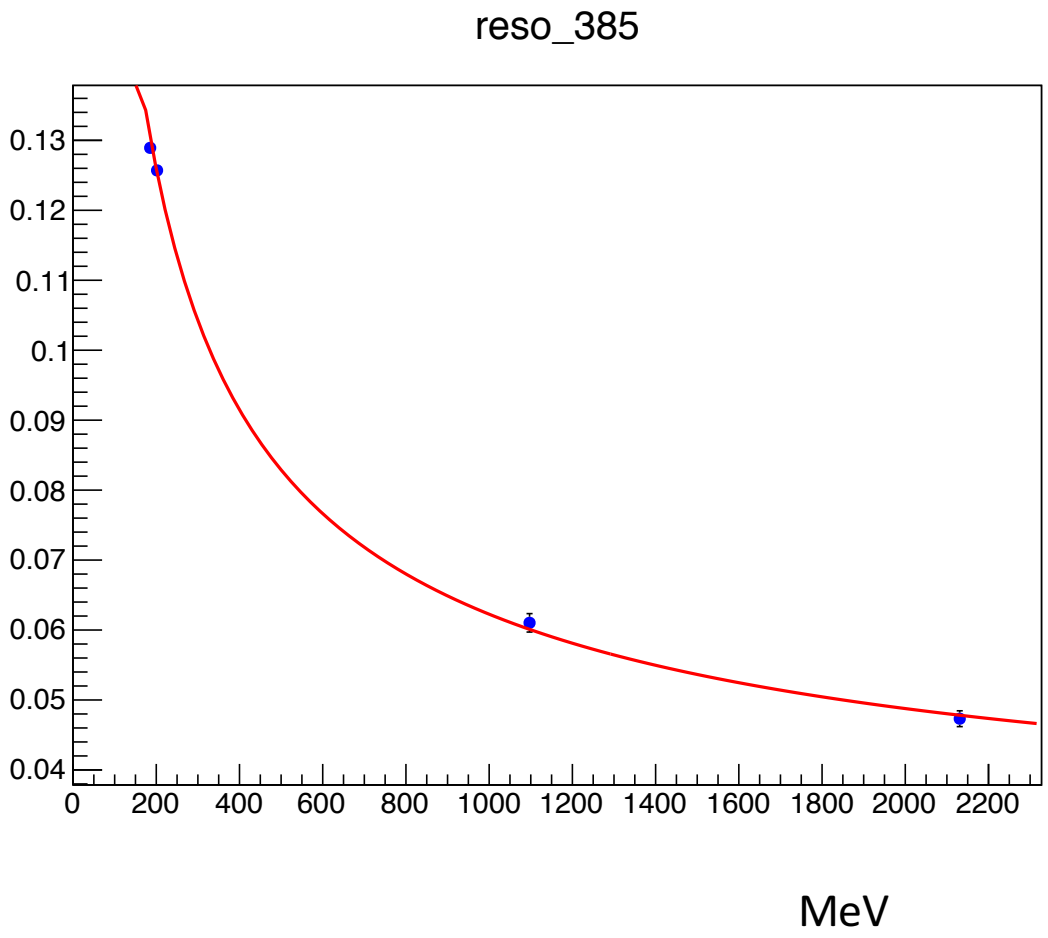


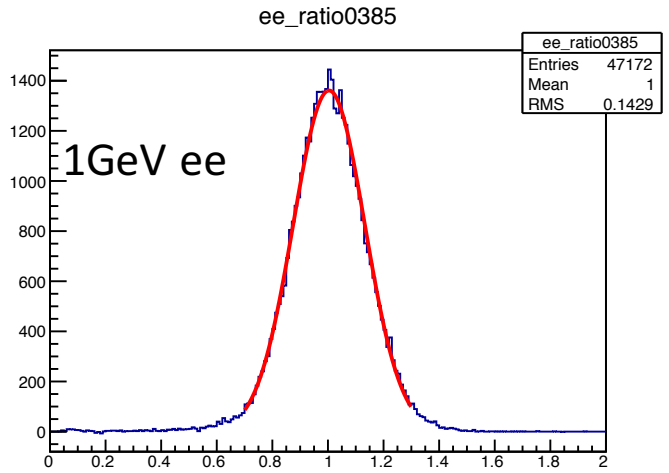


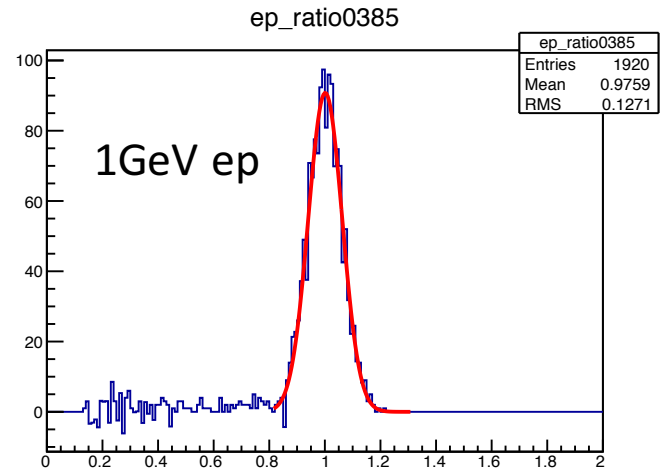


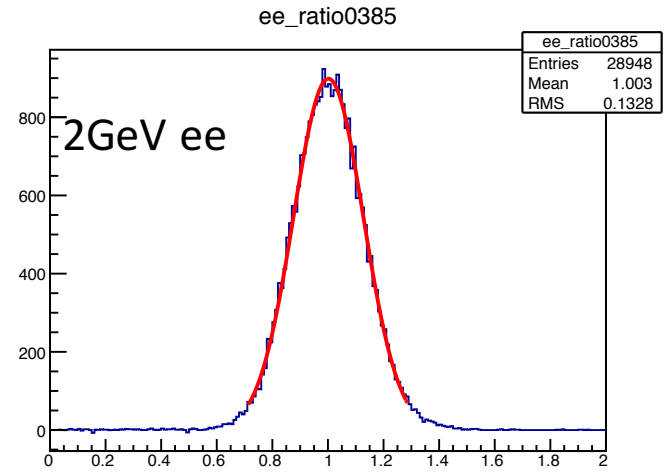


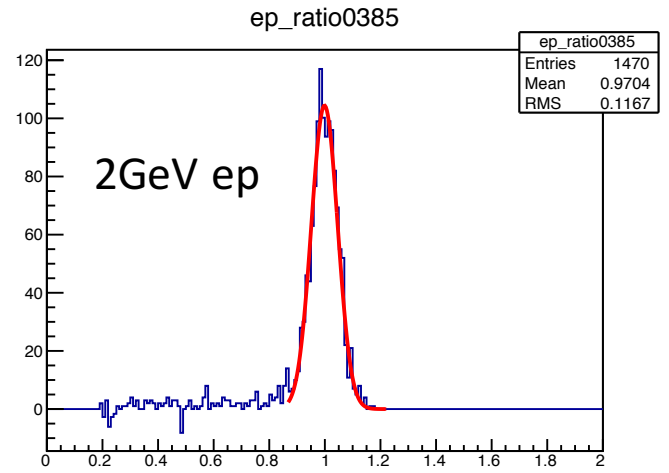
G385-–LG module at transition



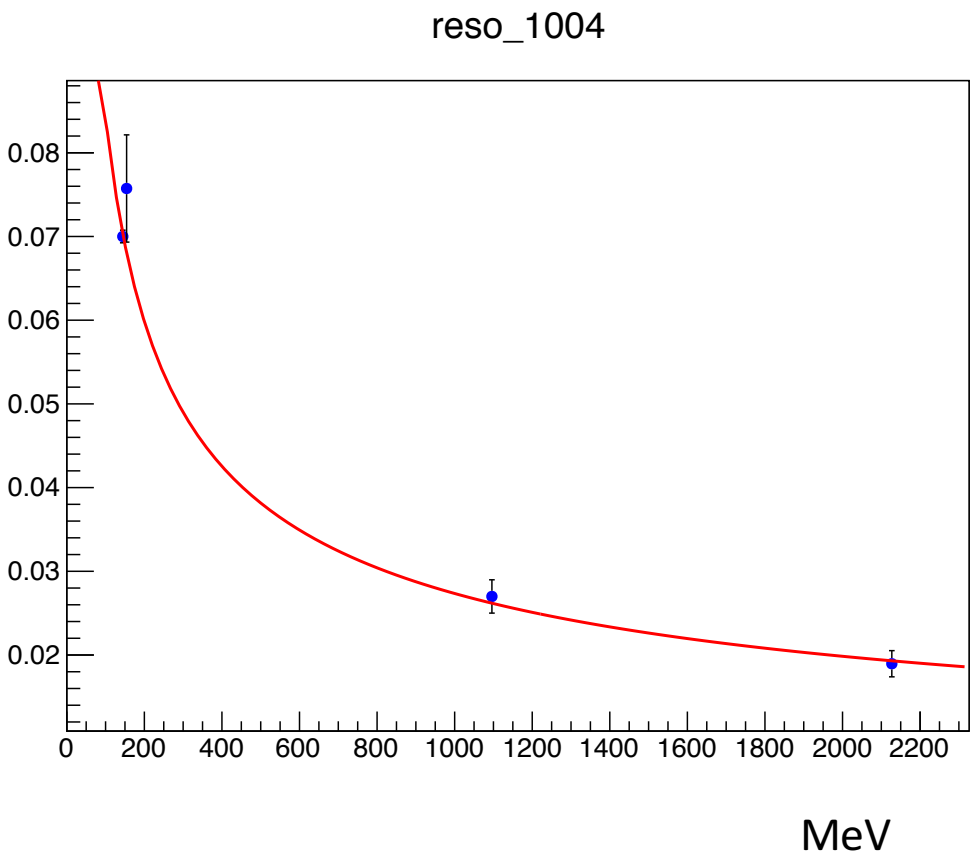


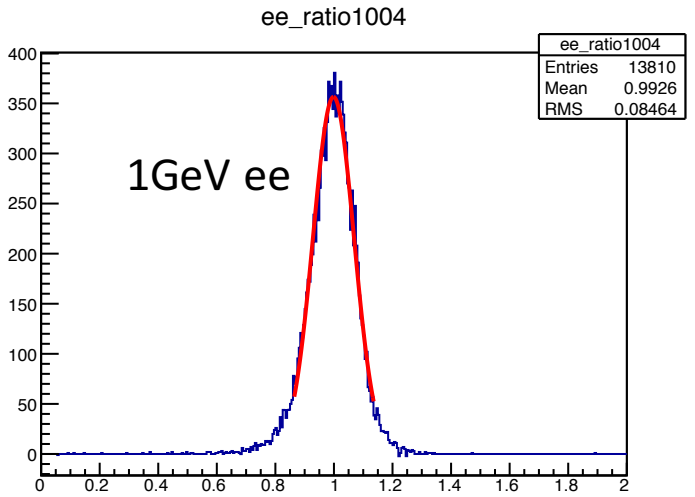


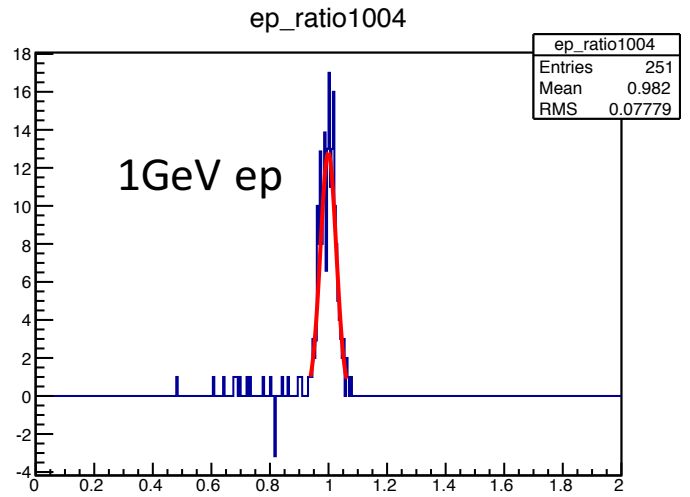


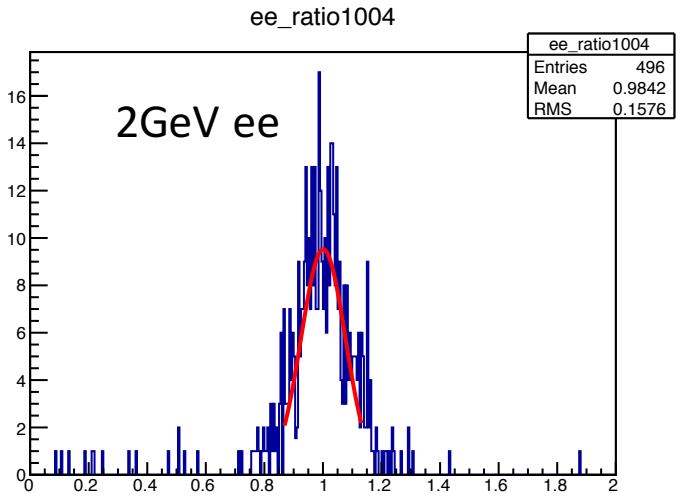


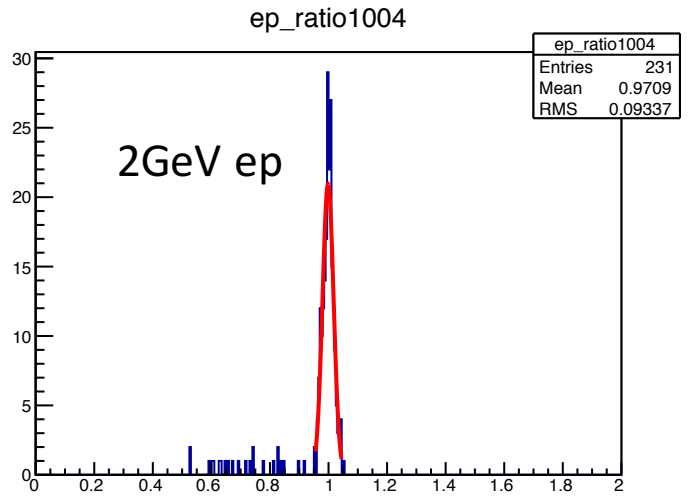
W4—PWO module at corner



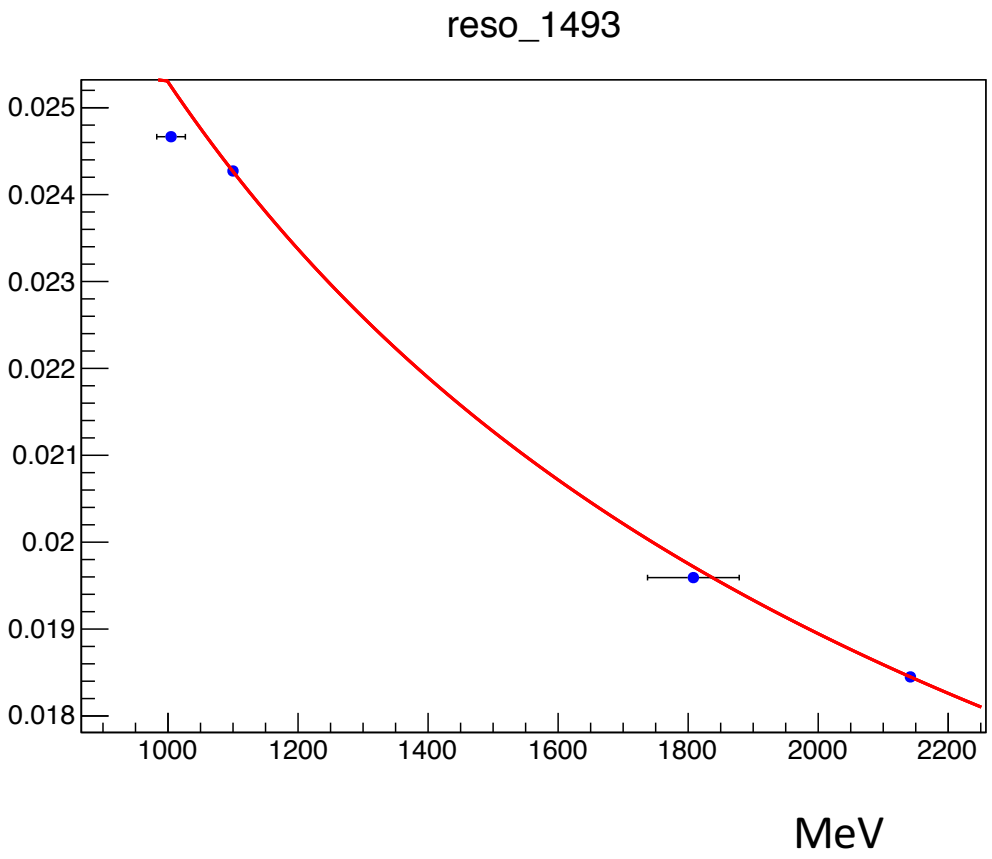


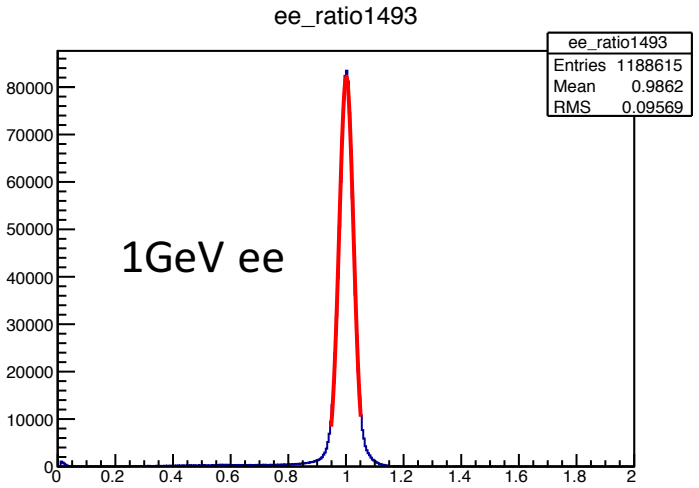


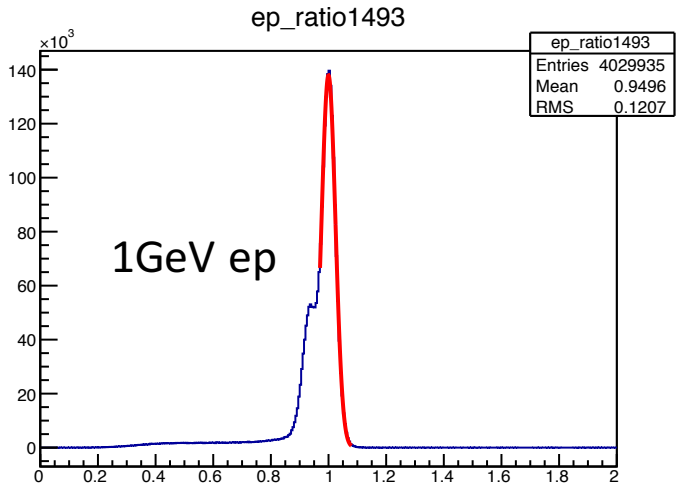


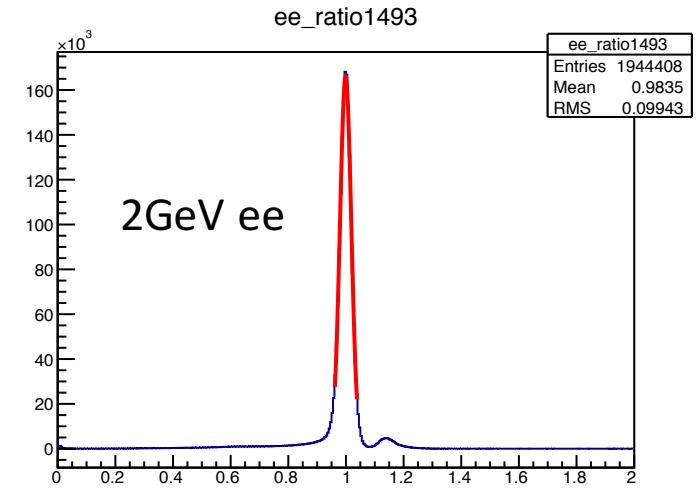


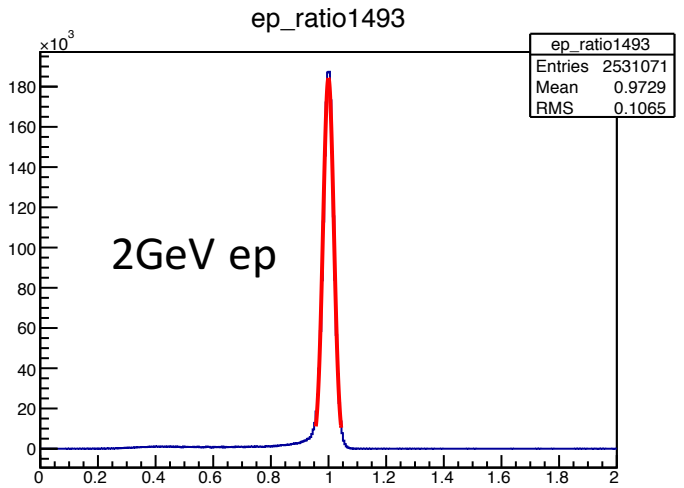
W1493—PWO 2nd inner layer



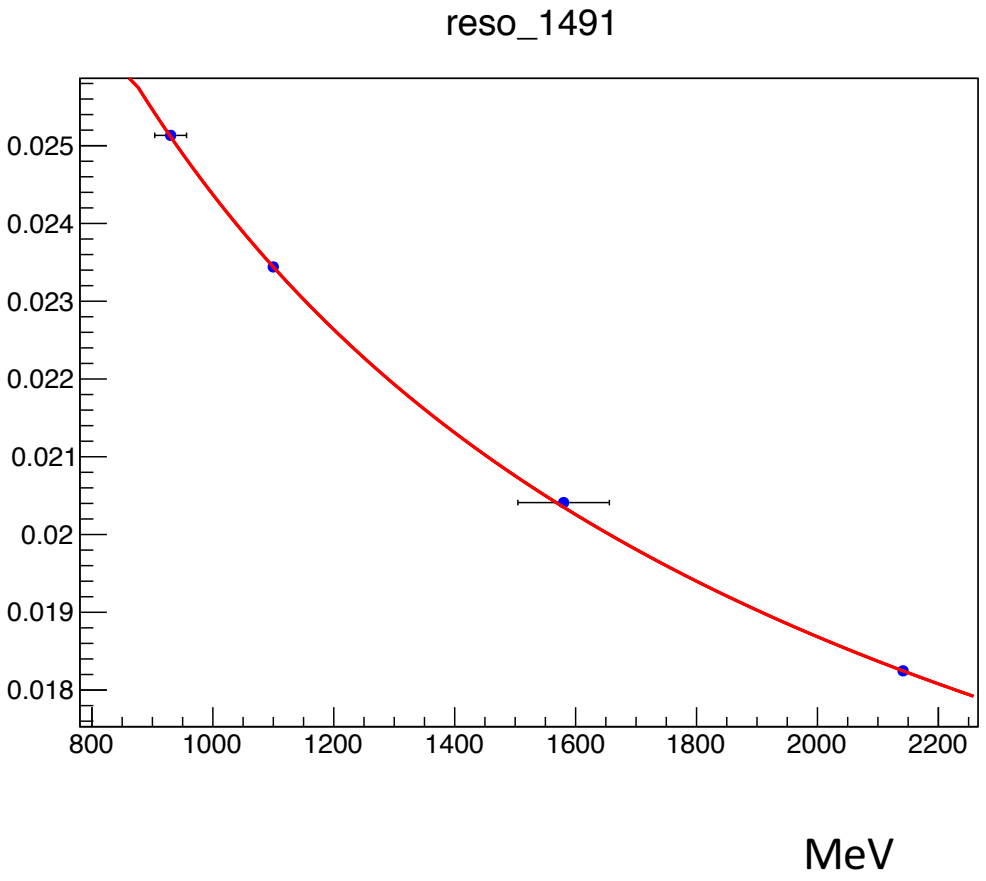


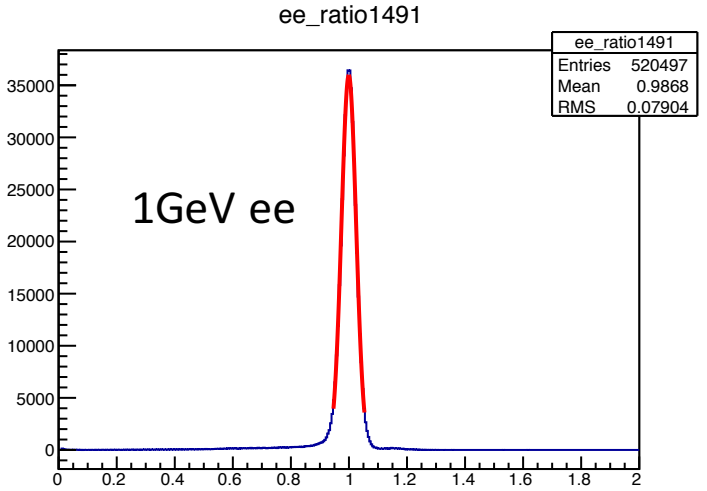


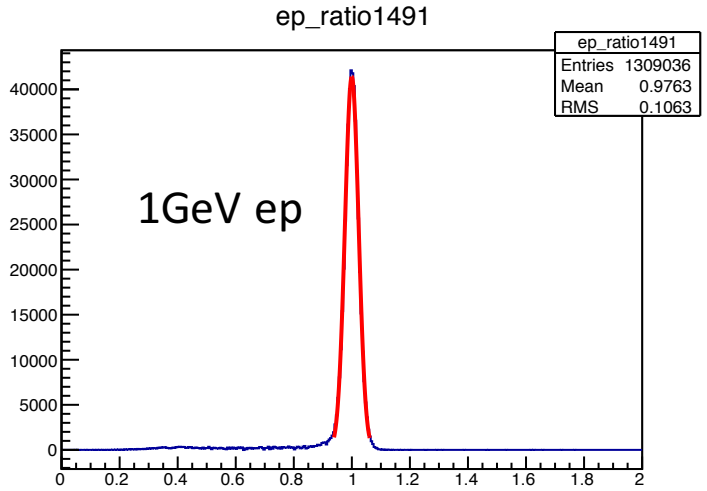


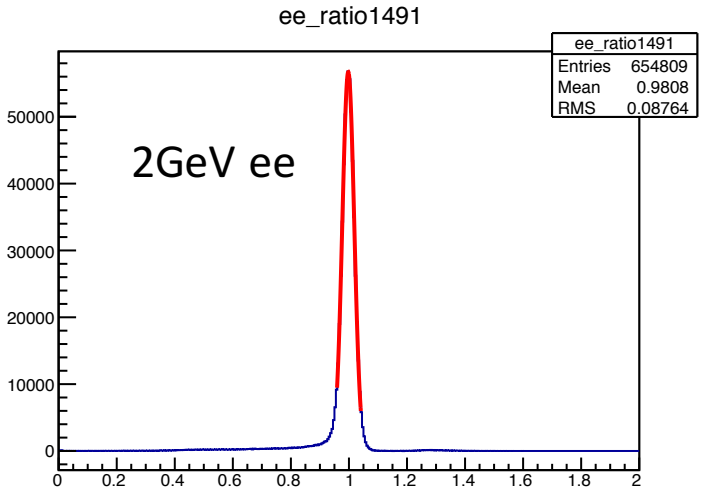


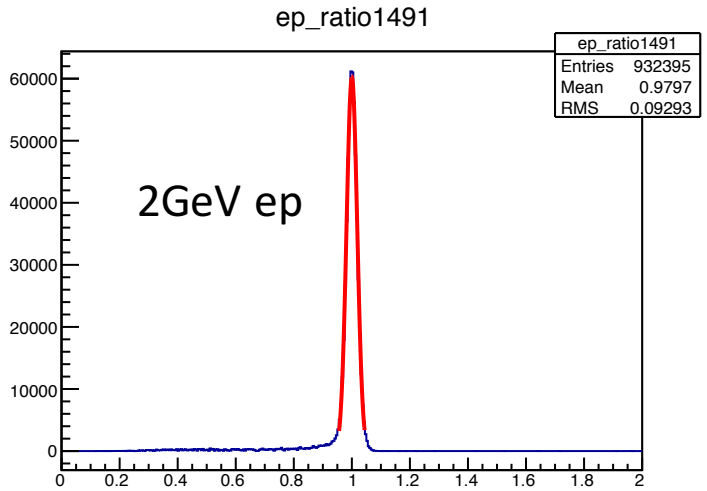
W1491—PWO 2nd inner layer











To do

- Will finalize the fitting parameters today, and give them to Maxime to compare with the results from snake runs
- Will implement it in the simulation, and finish simulation and data matching by next Friday
- Check the ep/ee ratio in 1GeV LG region