

Neutrals AWG Tasks & Jobs

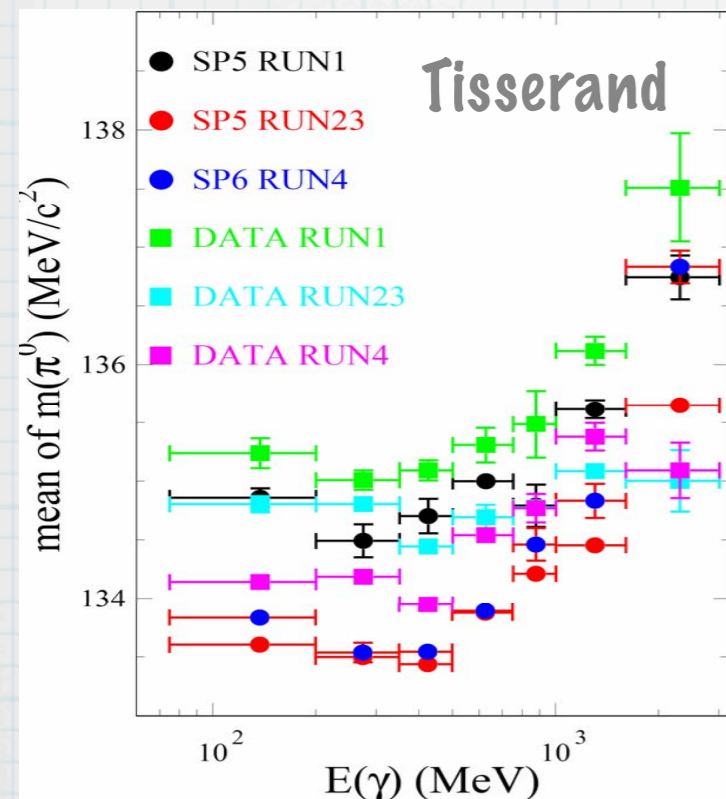
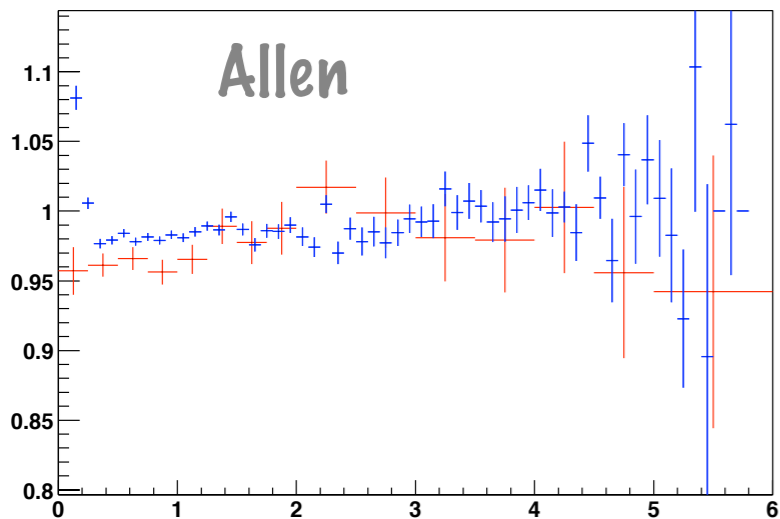
Aaron Roodman
Stanford Linear Accelerator Center
Tools Workshop Oct 1 2005

Neutral AWG Products

- π^0 Efficiency

- Central value with Momentum Dependence
- Beta level Corrections
- Systematic Error
- Merged π^0 too

Tau->Rho/Tau->Pi Double Ratio



- Single γ Efficiency

- Energy scale corrections

- Applied at Run time at Reco level

- Energy resolution smearing (Gaussian)

- EMC calibration validation

Neutral Tasks & Jobs

- Control Samples

- $\mu\mu\gamma$

Katharine Schofield

- $\tau \rightarrow \pi\pi^0$

Mark Allen

- B decays $B \rightarrow K^*\gamma$ and $B \rightarrow D^*\rho$

Sciolla & Bruinsma

- D decays $D \rightarrow K\pi\pi^0$ and $D_s^* \rightarrow \gamma D_s$

David Williams

- Code & Ntuples & Documentation



- Neutrals Energy correction

Vincent Tisserand
& David Payne



- Neutrals Energy Resolution smearing

David Hopkins



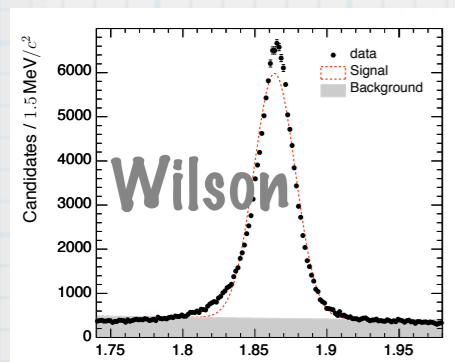
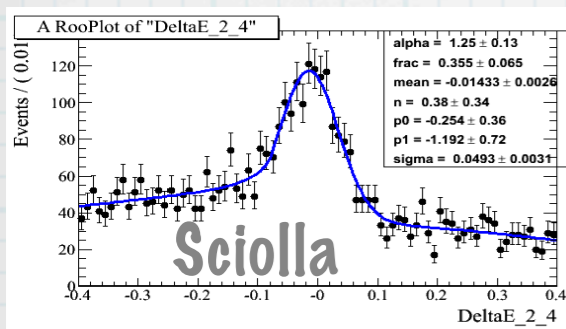
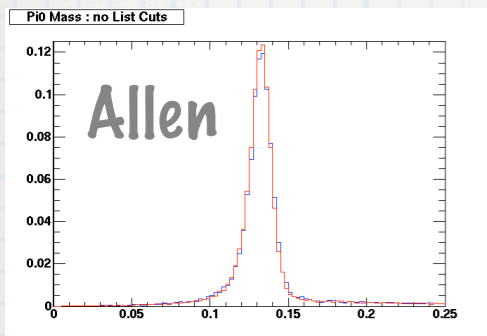
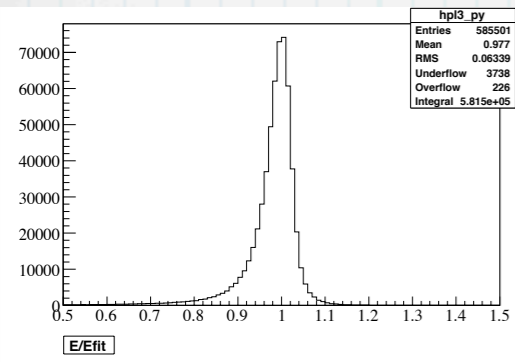
- Calibration or Release Validation



- Neutral Hadrons

Pellicioni &
Cote-Ahern

- DQG Representative



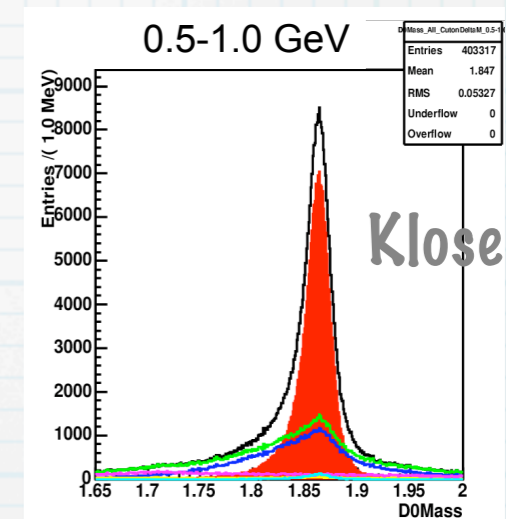
Neutral AWG Improvements

- Better π^0 Efficiency systematic - 3% now

- $\tau \rightarrow \pi\pi^0$ with $E_\gamma > 100$ MeV

- $D \rightarrow K\rho\pi^0 / D \rightarrow K\pi$ Verena Klose

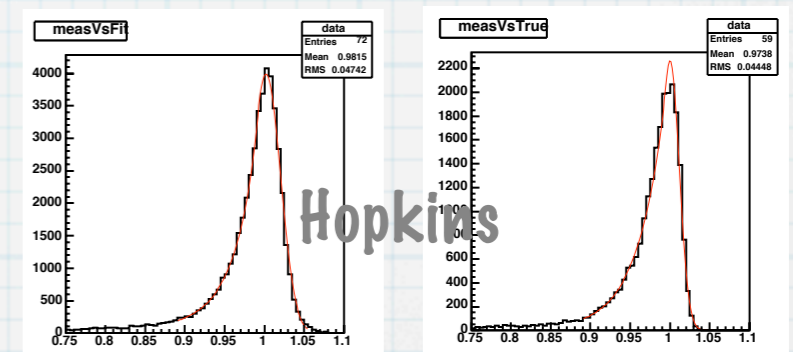
- $\omega \rightarrow \pi^+\pi^-\pi^0$ George Lafferty



- Merged π^0 and $\pi^0 \rightarrow \gamma e^+ e^-$

- Easy to use Corrections

- Better Energy Resolution Smearing

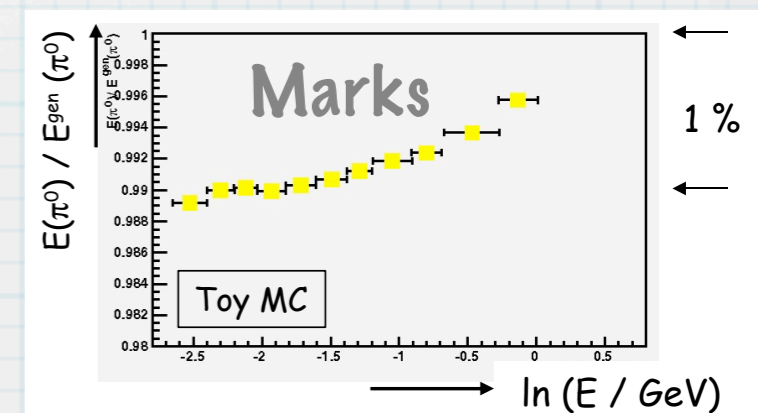


- Difference between γ calibration and π^0 Calibration

- change from m_{π^0} based to single E_γ

- effect of different resolution between Data & Mc

- validate using range of decays



Neutrals AWG

- * Decays with π^0 and γ rely on Neutrals Corrections
- * Opportunity to contribute and learn about EM-calorimetry
- * Neutrals needs help with Control samples and Validation

