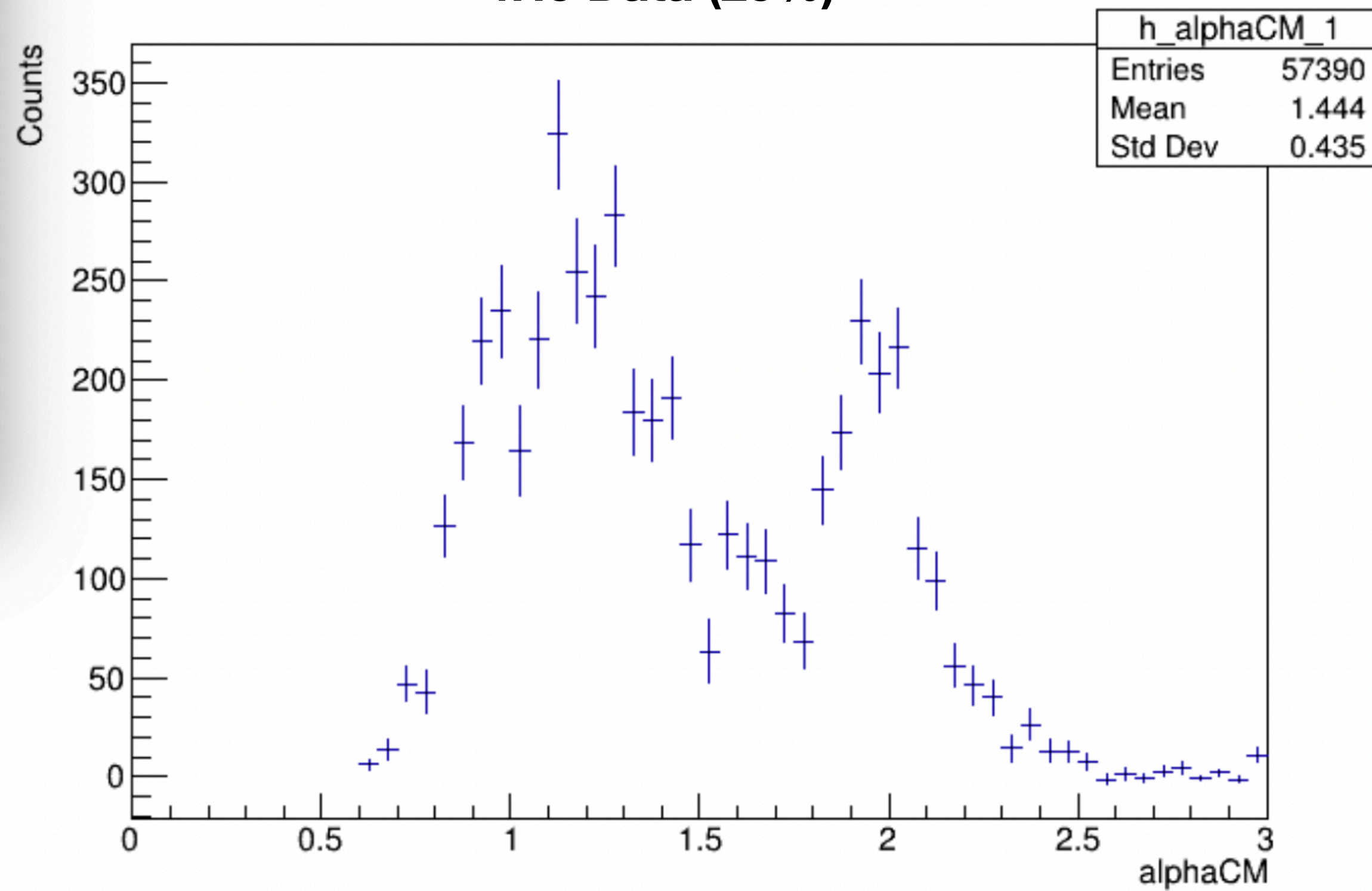


Looking for ${}^4\text{He}(\gamma, \rho^0 pp)$

- 3 positive tracks, 1 negative track, 0 neutral showers
- $\text{CL} > 0.05$
- Vertex cuts
- PID cuts
- GeV
- $k_{\text{miss}} > 0.4 \text{ GeV}$
- $0.3 < p_{\text{rec}} < 1.0 \text{ GeV}$
- $E_{\rho} + E_{\text{lead}} > 7 \text{ GeV}$
- $E_{\gamma} > 6 \text{ GeV}$
- $|E_{\gamma} + 2m_N - E_{\rho} - E_{\text{lead}} - E_{\text{rec}}| < 1 \text{ GeV}$
- $-t > 1 \text{ GeV}^2$

Initial indications of ${}^4\text{He}(\gamma, \rho^0 pp)$ signal

4He Data (25%)



4He Simulation

