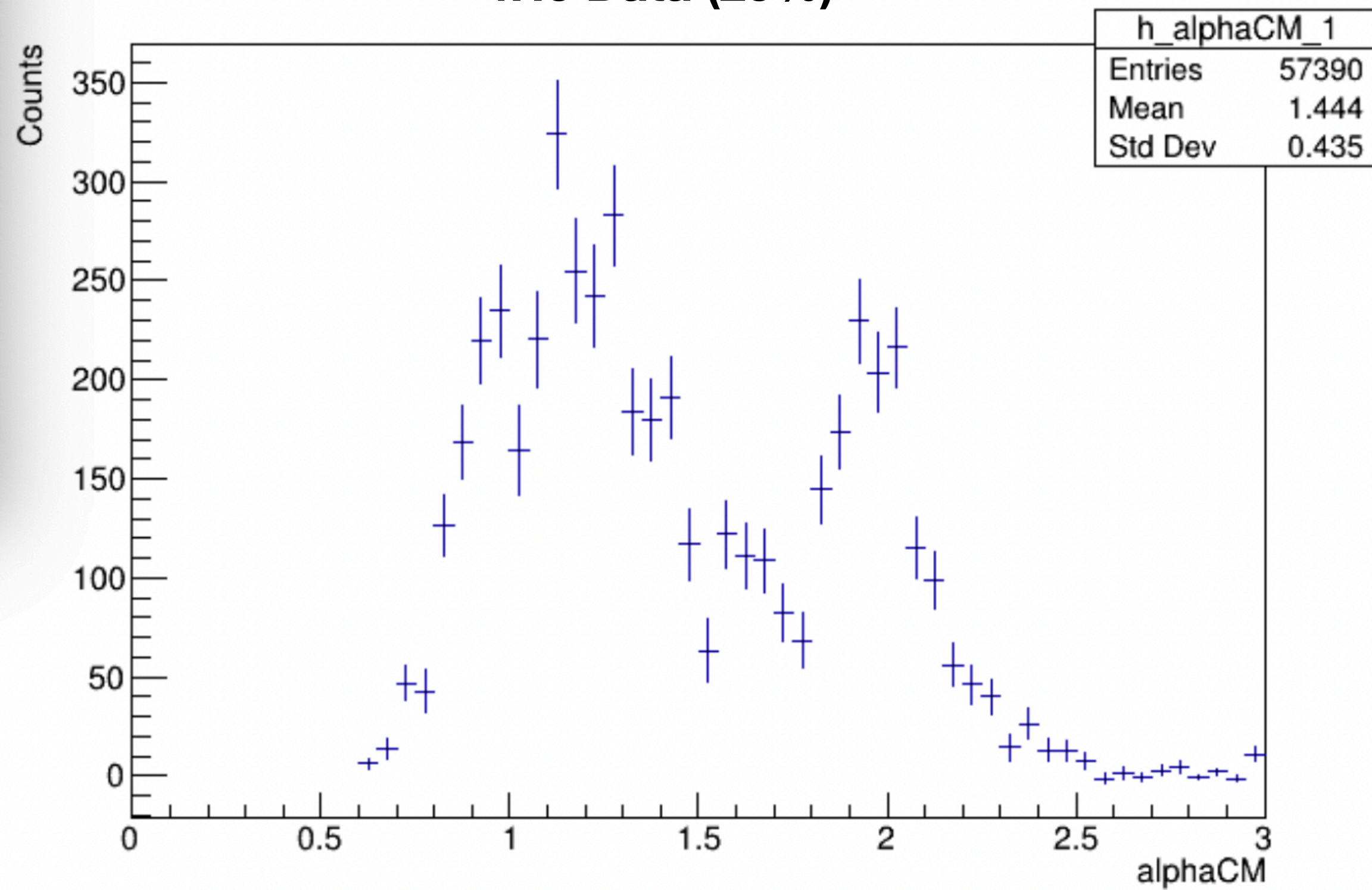


Looking for ${}^4\text{He}(\gamma, \rho^0 pp)$

- 3 positive tracks, 1 negative track, 0 neutral showers
- $CL > 0.05$
- Vertex cuts
- PID cuts
- $k_{miss} > 0.4 \text{ GeV}$
- $0.3 < p_{rec} < 1.0 \text{ GeV}$
- $0.65 < m_{\pi\pi} < 0.9 \text{ GeV}$
- $E_{\rho} + E_{lead} > 7 \text{ GeV}$
- $E_{\gamma} > 6 \text{ GeV}$
- $|E_{\gamma} + 2m_N - E_{\rho} - E_{lead} - E_{rec}| < 1 \text{ GeV}$
- $-t > 1 \text{ GeV}^2$

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

4He Data (25%)



4He Simulation

