

Enge Fitting

04.14.14

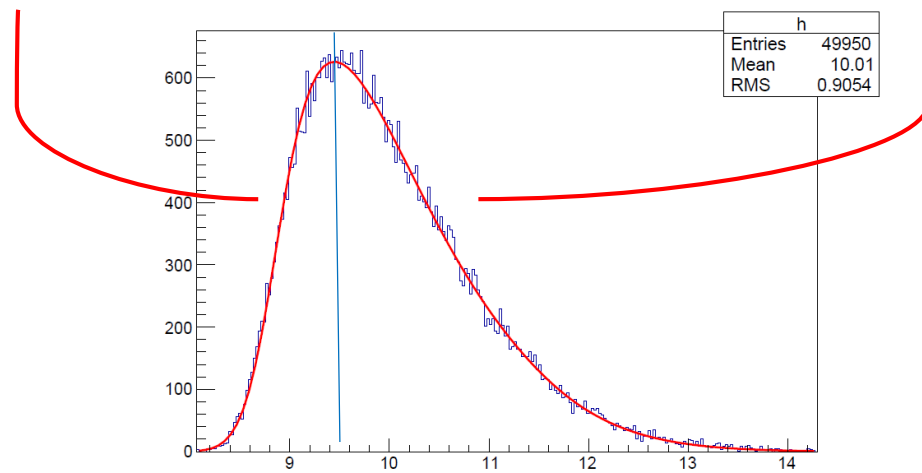
Talking Points

- Overview
- Cutoff Percentage
- Thin Absorbers
- Reproducibility (Enge generator)

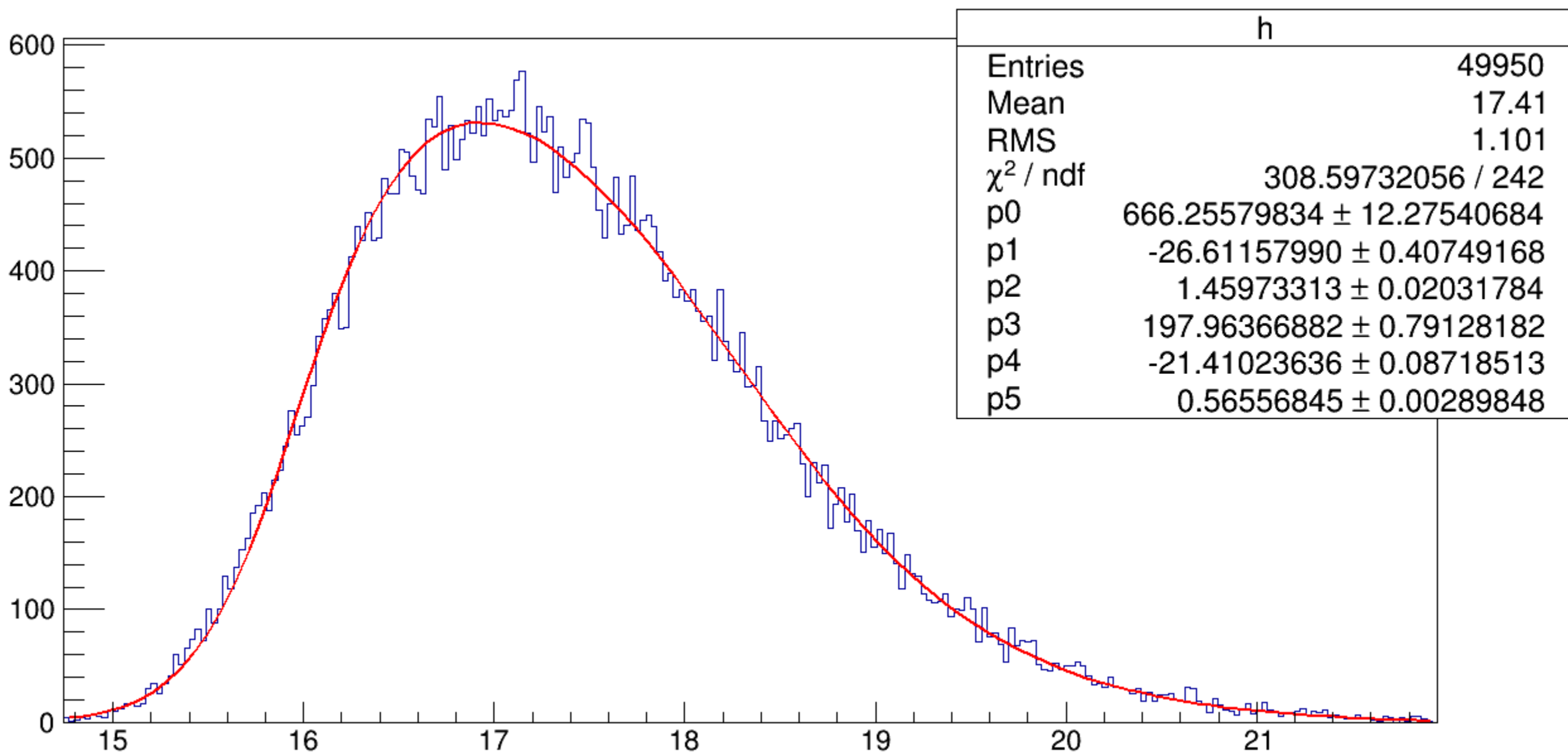
Parameter Fitting: How many is enough?

- Function is split into two tails, as seen below
- 5 are minimally needed to take care of long right-hand tail
- More parameters make for a slightly better fit, but (even small ones) make the fit unpredictable

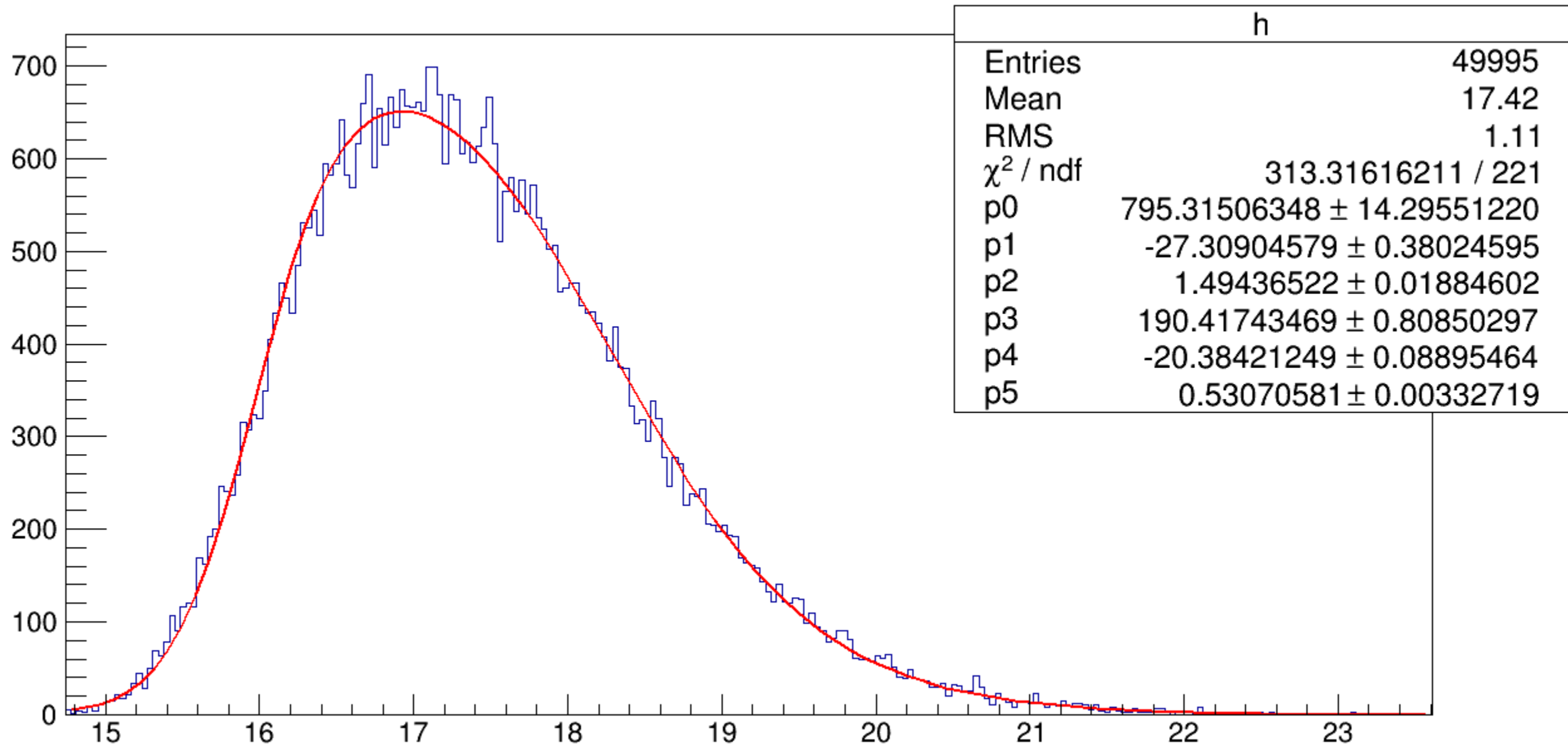
$$\frac{1}{1 + \exp([1] + [2]x)} * \frac{1}{1 + \exp([3] + [4]x + [5]x^2)}$$



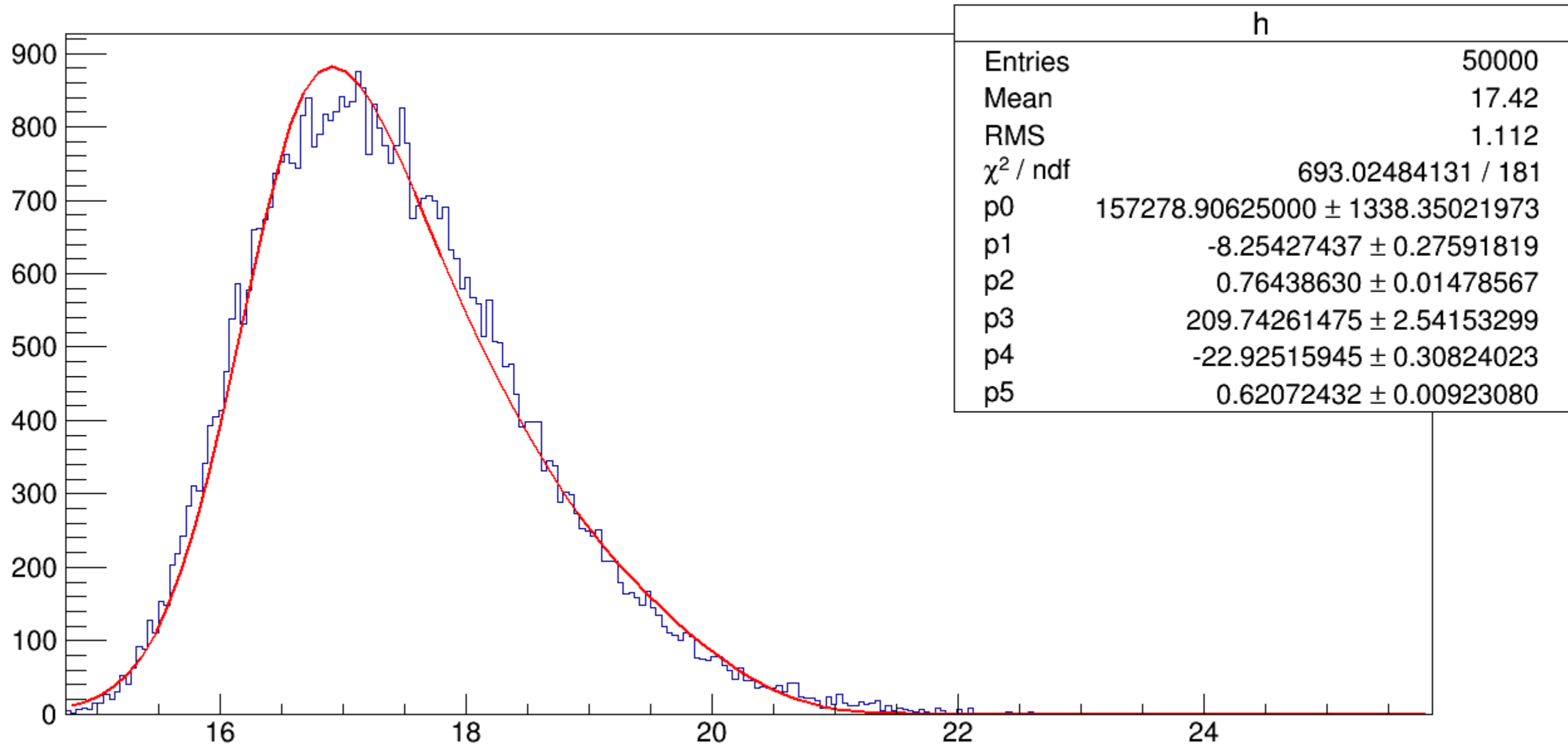
Keep 99.9%, 99.99%, or 100%?



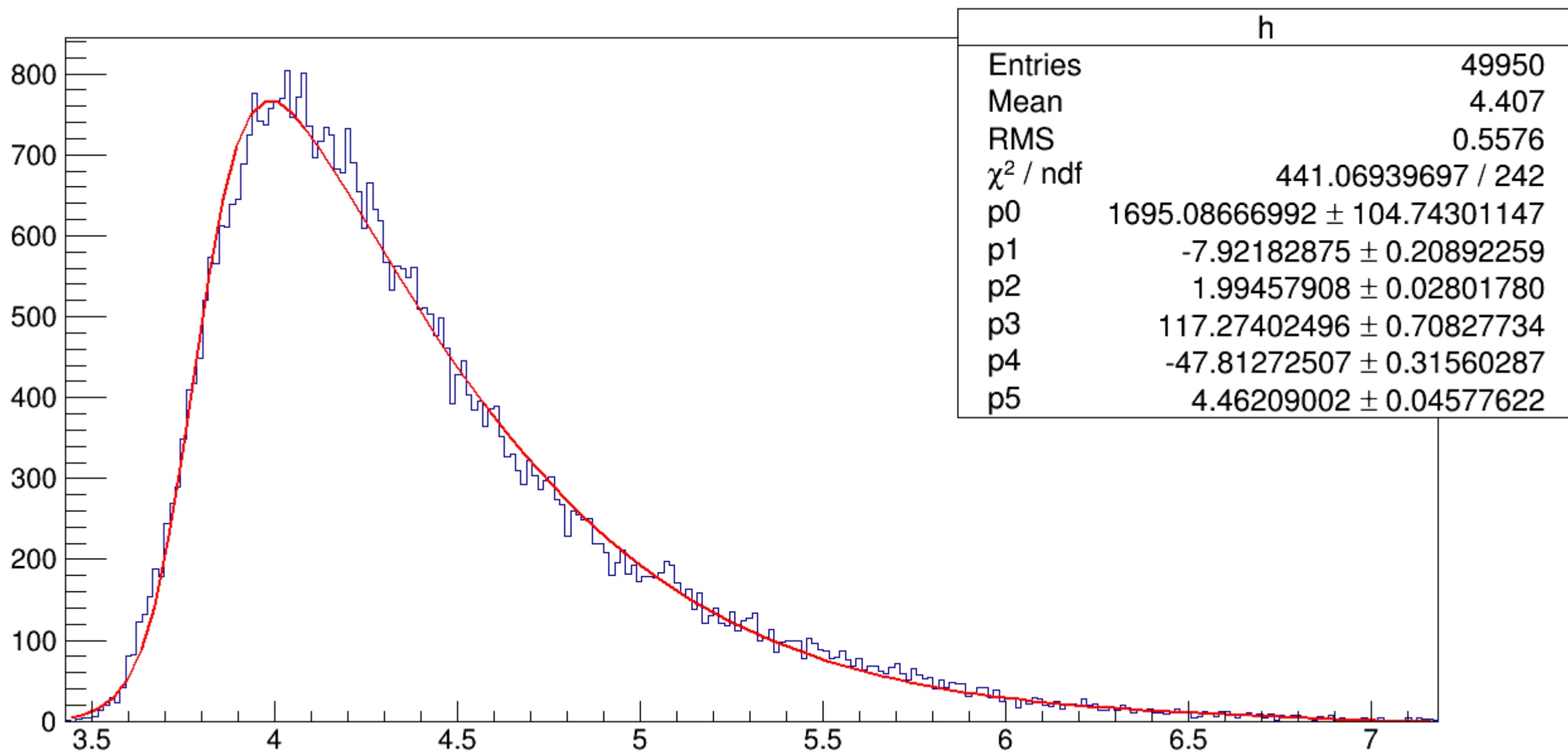
Keep 99.9%, 99.99%, or 100%?



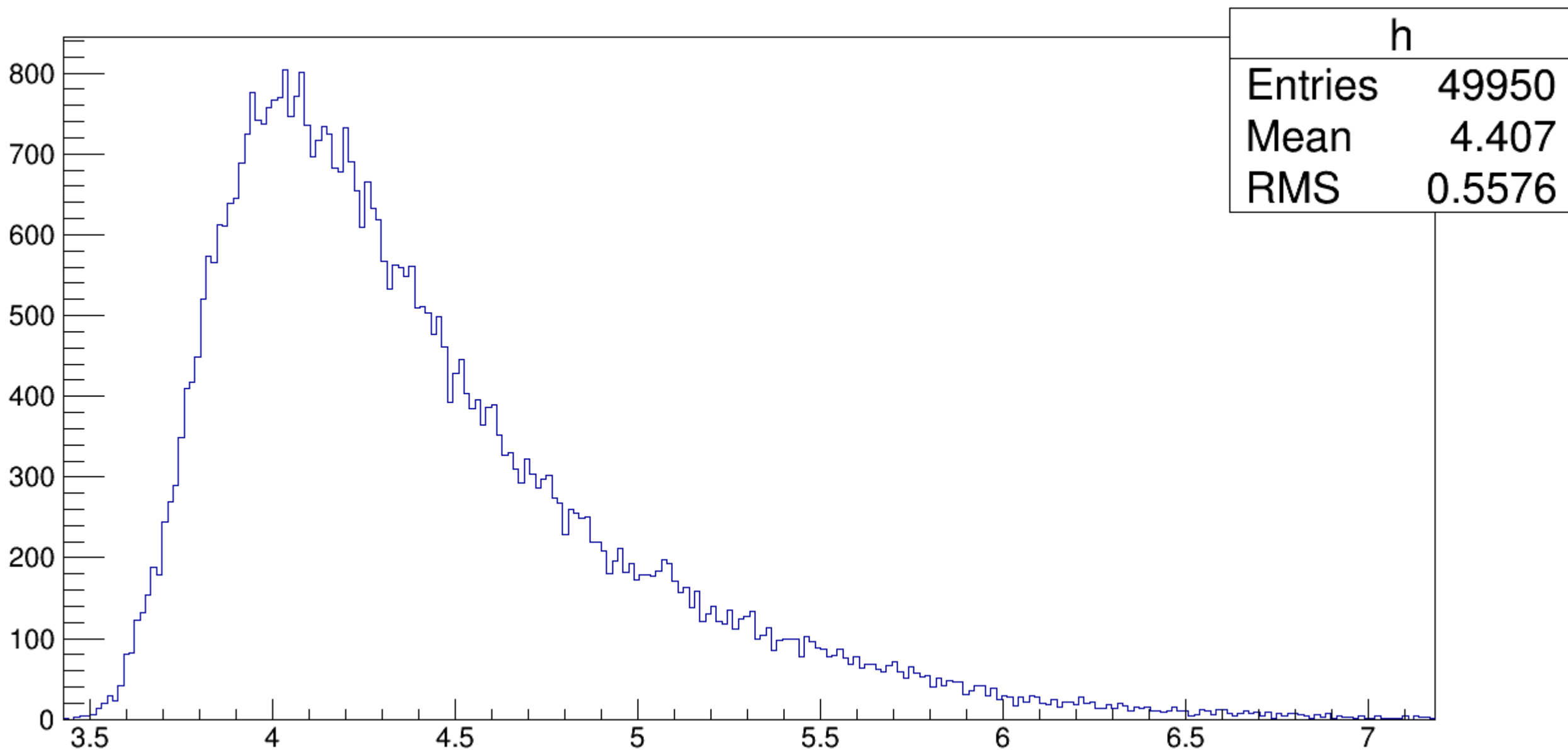
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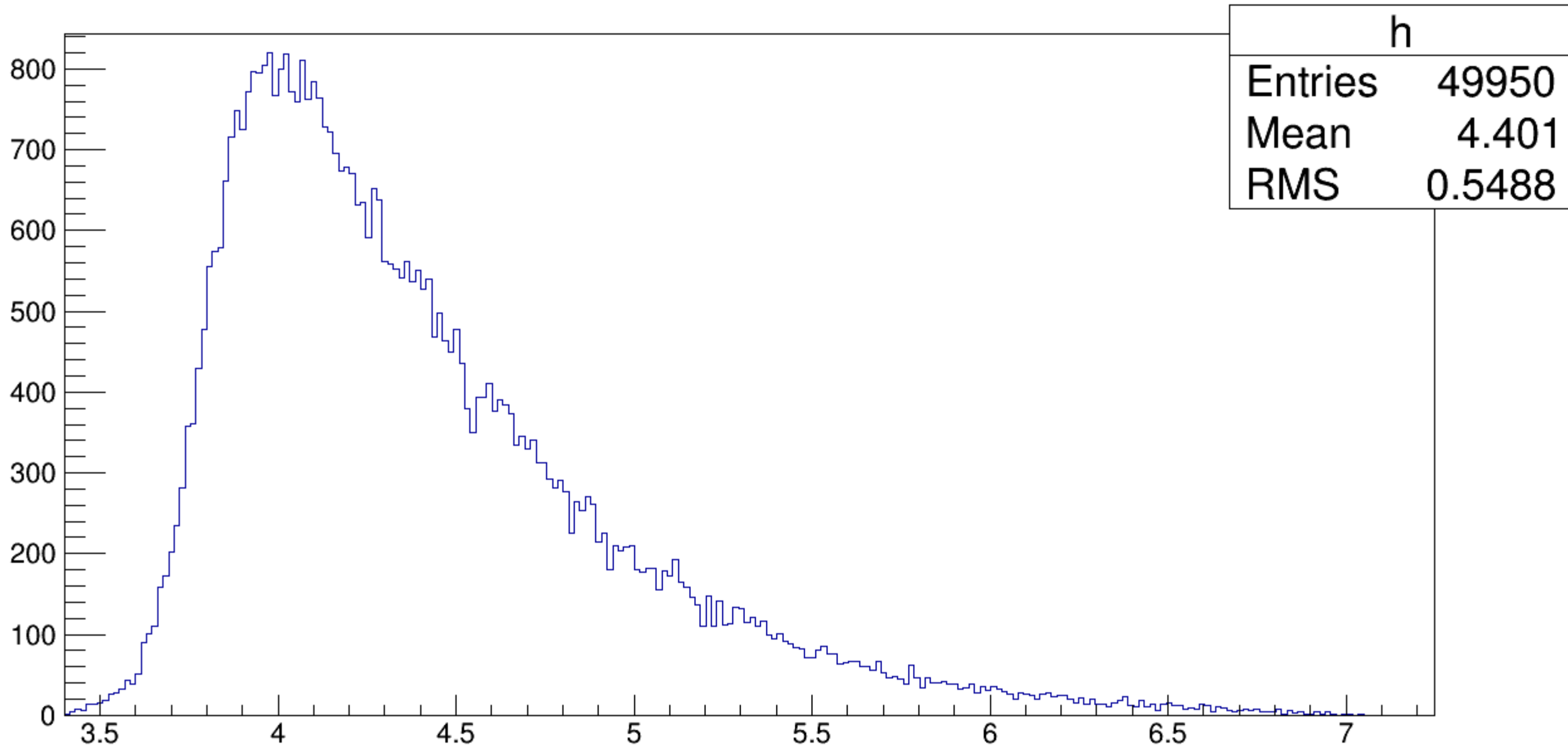
“Thin” Absorbers: 5 MeV/c Momentum Loss



Reproducibility: ICOOL



Reproducibility: COSY



Reproducibility: ICOOL (Variation)

