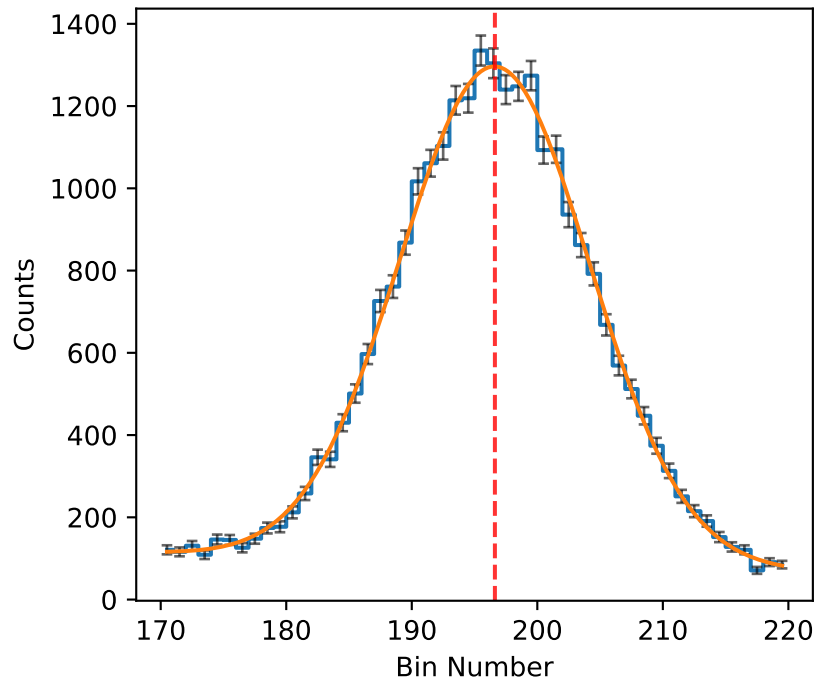


$^{22}\text{Na}$  Spectrum: Counts vs Bin Number



— MLE Model  
- - Peak (0.511 MeV) centroid,  $A_4 = 196.62 \pm 0.07$   
I Poisson uncertainties

$$R(n) = |A_1 + A_2(n - A_4)| \\ + |A_3| \exp \left[ -0.5 \frac{(n - A_4)^2}{A_5^2} \right]$$

$$R(n) = |90.2 + -0.879(n - 196.62)| \\ + |1.21\text{e} + 03| \exp \left[ -0.5 \frac{(n - 196.62)^2}{7.56^2} \right]$$

$^{22}\text{Na}$  Spectrum: Normalized residuals

