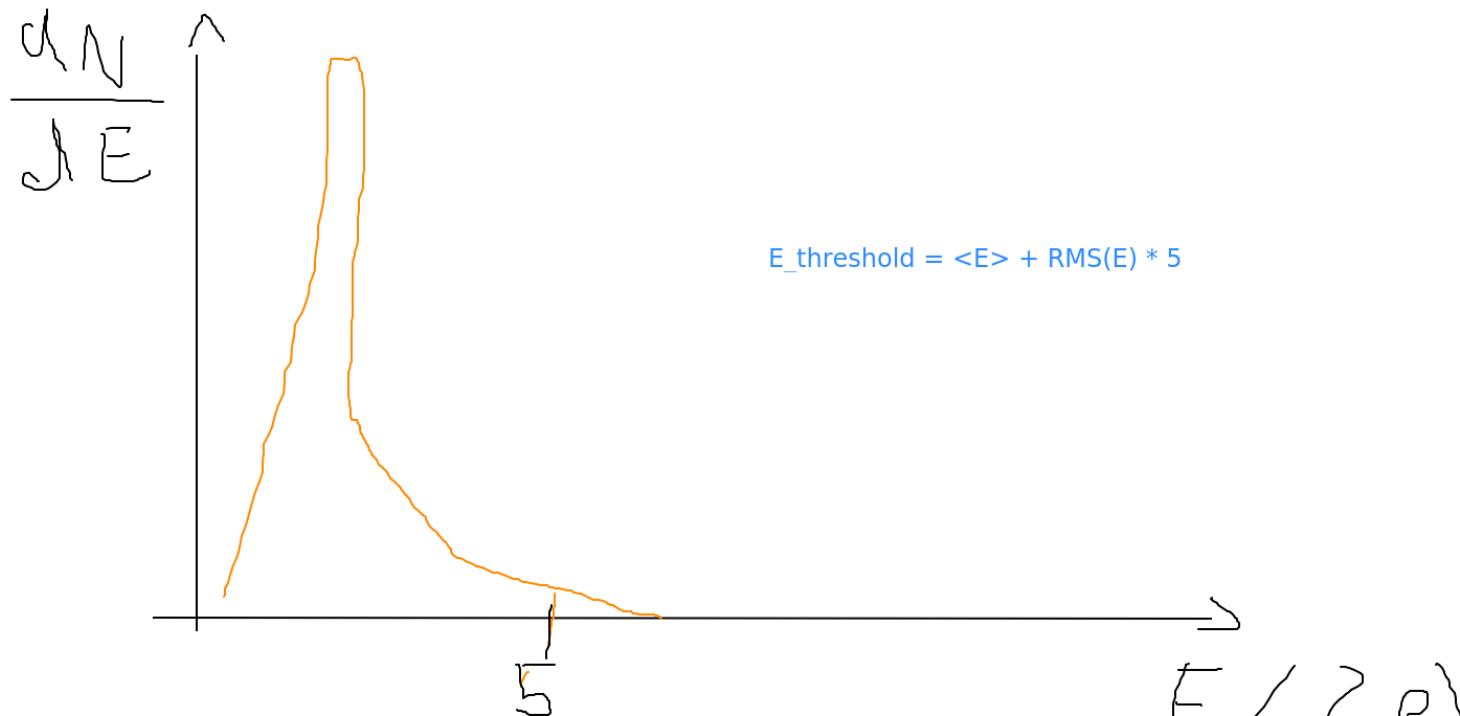


$$\langle x \rangle = 1/n \sum_i x_i$$

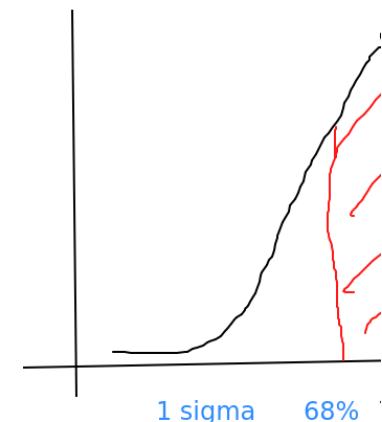
$$\text{RMS}(x) = 1/n \sum_i (x_i - \langle x \rangle)^2$$

$$\text{moment}_i(x) = 1/n \sum_i (x_i - \langle x \rangle)^i$$



$$E_{\text{threshold}} = \langle E \rangle + \text{RMS}(E) * 5$$

If distribution is Gaussian, then simple relation between RMS, s probability



1 sigma 68%