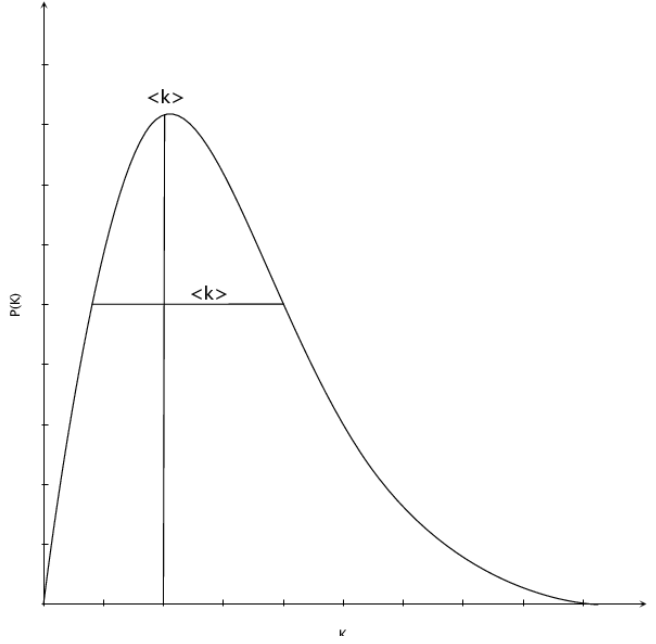
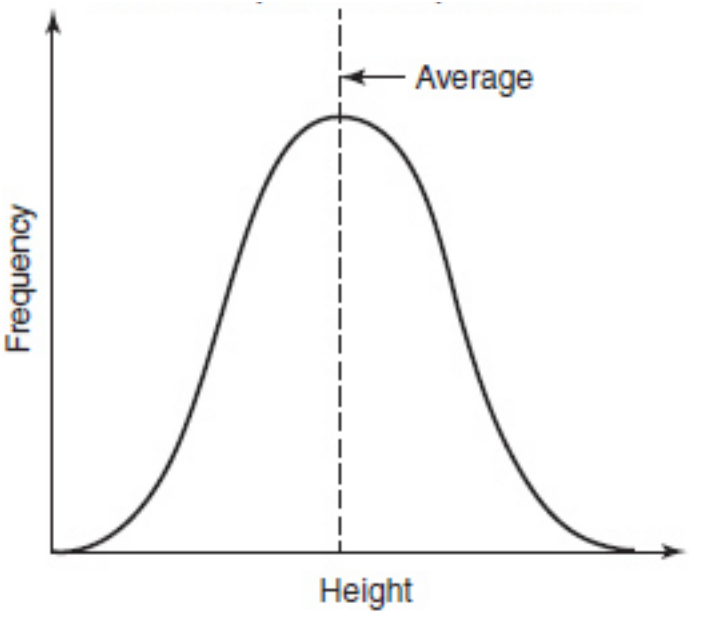
Poissonian

$$P(k) = \frac{\langle k \rangle^k}{k!} e^{-\langle k \rangle}$$



Gaussian

$$P(k) = \frac{1}{\sigma\sqrt{2\pi}} e^{-\frac{(k-\langle k \rangle)^2}{2\sigma^2}}$$



Power-law

$$P(k) = Ck^{-\gamma}$$