

Statistiky použité místo/jako MLE pro Rényiho odhady s parametrem $\alpha = 0$.

Cauchy

Nejsou to MLE.

$$\begin{aligned}p_{(\mu,\sigma)}(x) &= \frac{1}{\pi\sigma} \left(1 + \left(\frac{x-\mu}{\sigma}\right)^2\right)^{-1} \\ \hat{\mu} &= \frac{X_{1-p} + X_p}{2}, \quad p = 0.5565 \\ \hat{\sigma} &= \frac{X_{0.75} - X_{0.25}}{2}\end{aligned}$$

Laplace

Jsou to MLE.

$$\begin{aligned}p_{(\mu,\theta)}(x) &= \frac{1}{2\theta} \exp\left[-\frac{|x-\mu|}{\theta}\right] \\ \hat{\mu} &= X_{0.5} \\ \hat{\theta} &= \frac{1}{n} \sum_{i=1}^n |x_i - \hat{\mu}|\end{aligned}$$

Normální

Jsou to MLE.

$$\begin{aligned}p_{(\mu,\sigma^2)}(x) &= \frac{1}{\sqrt{2\pi\sigma^2}} \exp\left[-\frac{(x-\mu)^2}{2\sigma^2}\right] \\ \hat{\mu} &= \frac{1}{n} \sum_{i=1}^n x_i \\ \hat{\sigma}^2 &= \frac{1}{n} \sum_{i=1}^n (x_i - \hat{\mu})^2\end{aligned}$$