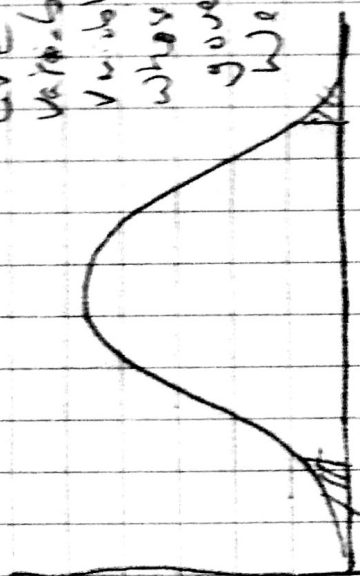


Bayesian Credible Interval

All unobserved quantities are treated as random variables. A random variable is a quantity whose behavior is governed by chance. We seek to understand the probability distribution

$[y|\theta]$

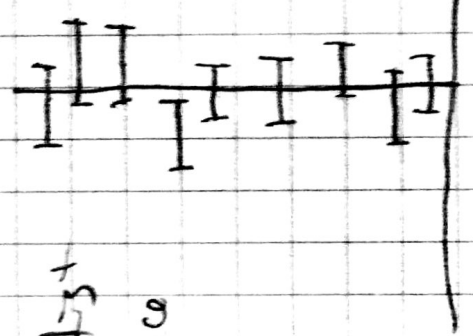


controlling the behavior of these random variables

Random

all same width

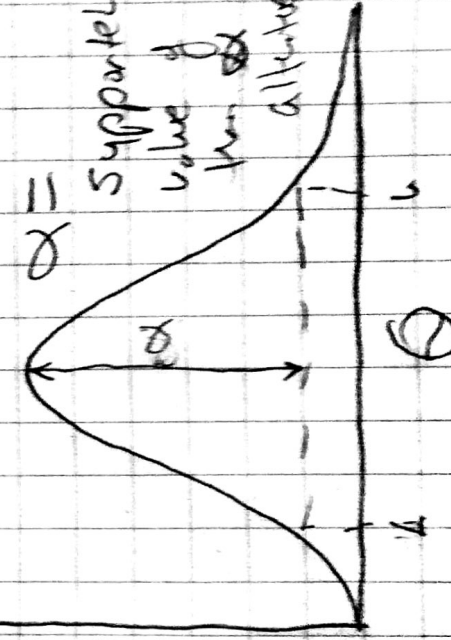
Frequency Confidence Interval



Fixed

Profile Confidence Interval
" (Wald)

$\log(E[y|\theta])$



Support range: MLE value of θ has no more than $\alpha \times$ support of alternative values of θ with $\alpha < 1$

$$2\alpha \sim \chi^2_1$$