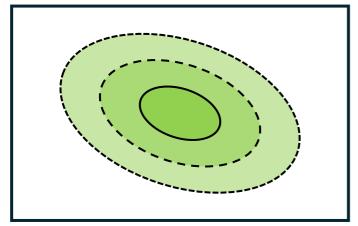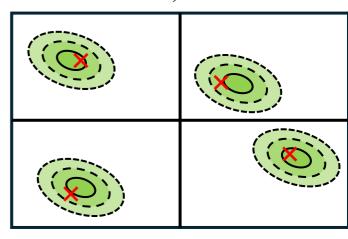MCMC

$$p(\boldsymbol{\theta}|\boldsymbol{x_o})$$

Estimates posterior for one
single observation

NPE, TNPE

$$p(\boldsymbol{\theta}|\boldsymbol{x}) \quad \forall \boldsymbol{x} \sim p(\boldsymbol{x})$$

Estimates posteriors for all
simulated observations