	Prior	Likelihood	Example
Classic Bayes	$\boldsymbol{\theta} \sim \pi(\boldsymbol{\theta})$	$Y \sim F(\boldsymbol{\theta})$	$\boldsymbol{\theta} = (\mu, \sigma^2)$ $Y \sim \mathcal{N}(\mu, \sigma^2)$
Bayesian Inverse Problem	$\boldsymbol{u} \sim \pi(\boldsymbol{u}) \rightarrow m(\cdot) \rightarrow \boldsymbol{\theta}$ $\uparrow X$	$Y(X) \sim F(\boldsymbol{\theta})$	$\boldsymbol{\theta} = (\mu(X), \Sigma(X))$ $Y(X) \sim \mathcal{N}_n(\mu, \Sigma)$