

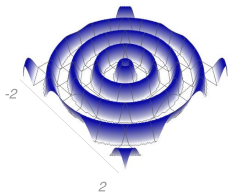
Prior
over parameters
 $\theta \sim p(\theta) \in \Theta$



①

LF Simulator

a large amount of LFM
simulations
(cheap, coarse)
 $x_L \sim p_L(x_L|\theta)$



②

**Pre-trained
density estimator**
 $\mathbb{E}[-\log q_\psi(\theta|x_L)]$

Transfer knowledge

③

**Multifidelity
density estimator**
 $\mathbb{E}[-\log q_\phi(\theta|x)]$

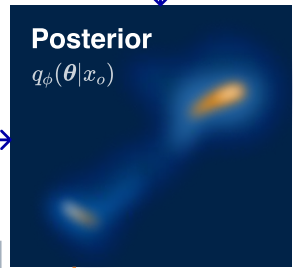
⑤

Real data
 x_o



⑤

Posterior
 $q_\phi(\theta|x_o)$



θ_j

θ_i

probability density

⑤