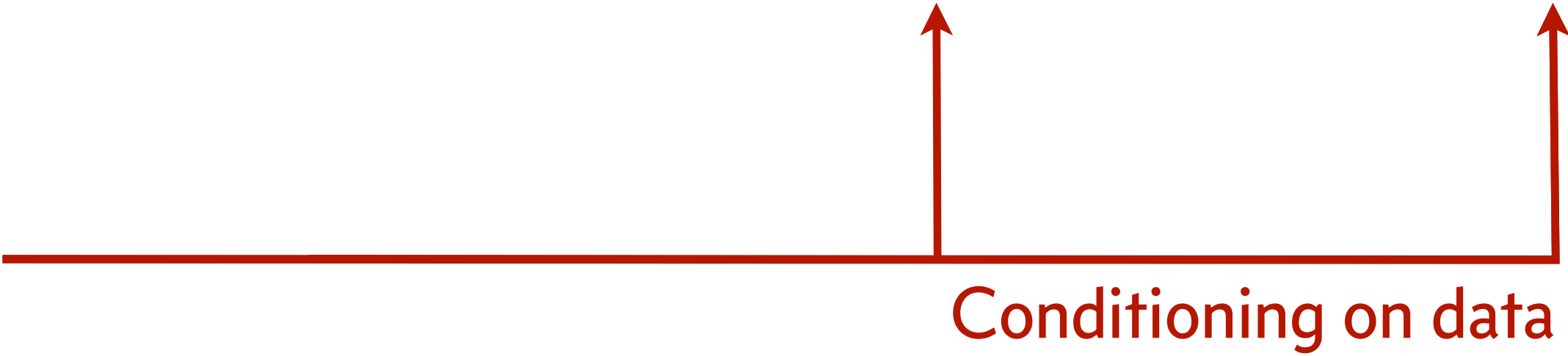




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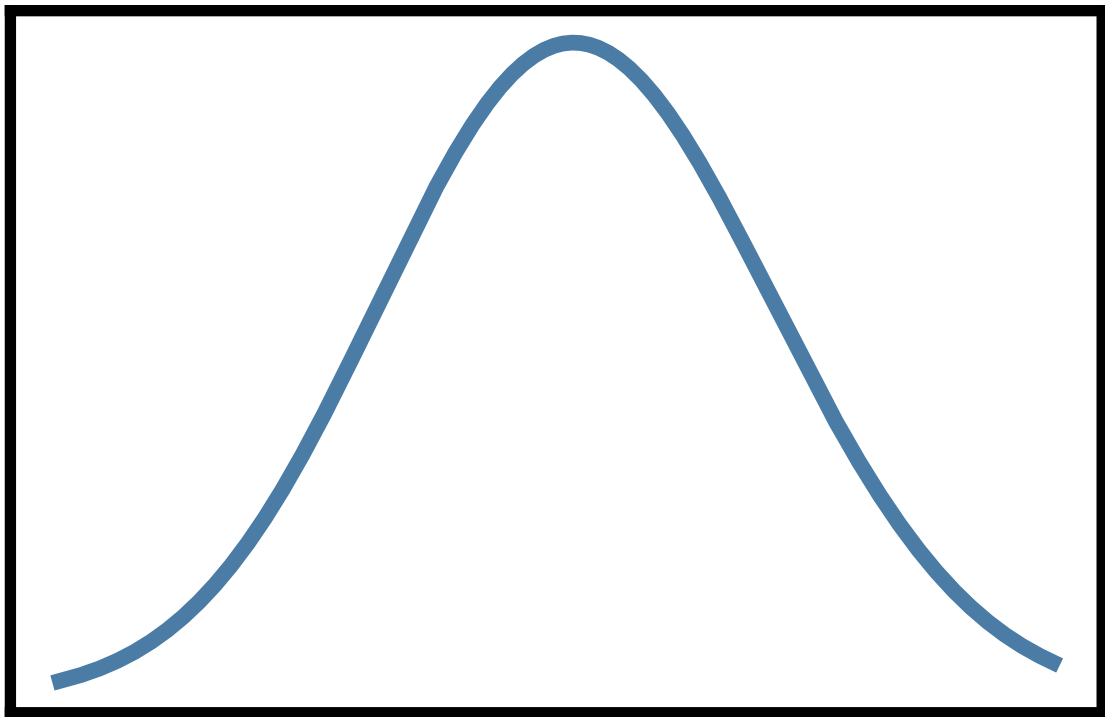
3

Flow in simulation-based inference

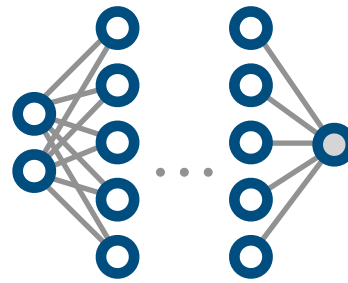
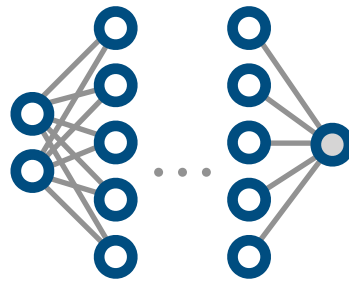
Flows are *not* only employed as *conditional* *posterior* *density* *estimators* in *simulation-based* *inference*



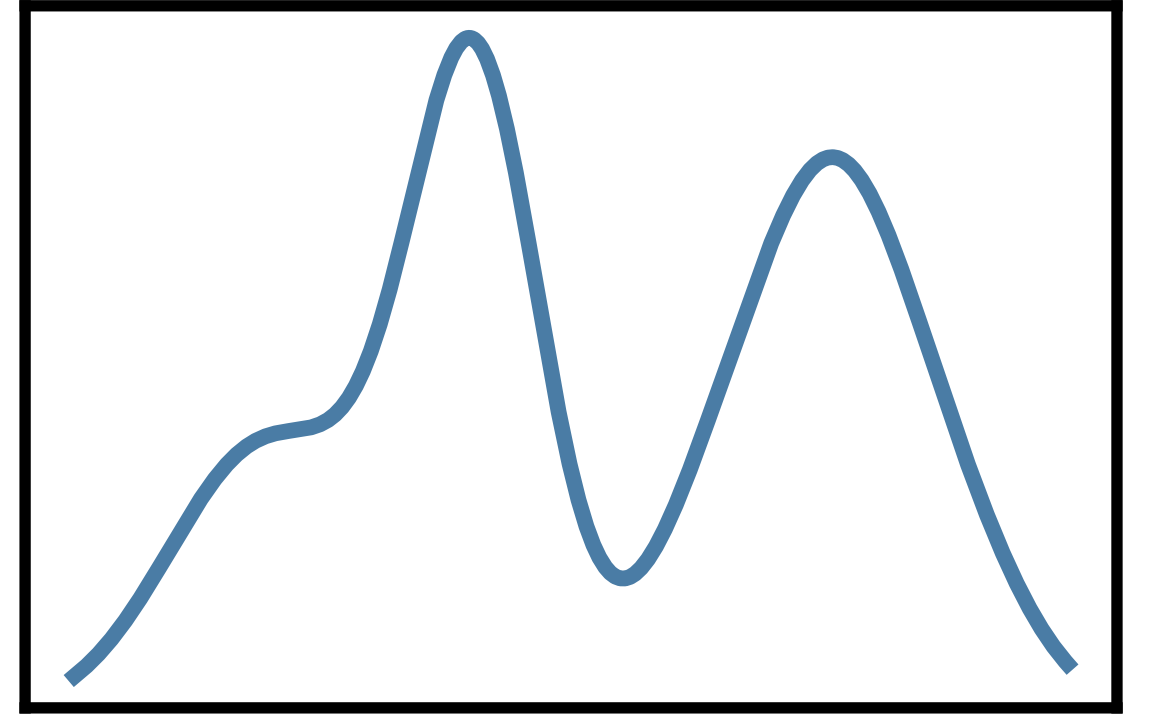
$p(z)$



$f_{\vartheta}$



Posterior distribution  $p(\theta \mid x)$



Density estimation

$$\mathcal{L} = \log p_f(\theta | g(x)); \text{optimize } \{g_\varphi, f_g\} \text{ simultaneously}$$

Data

$x$



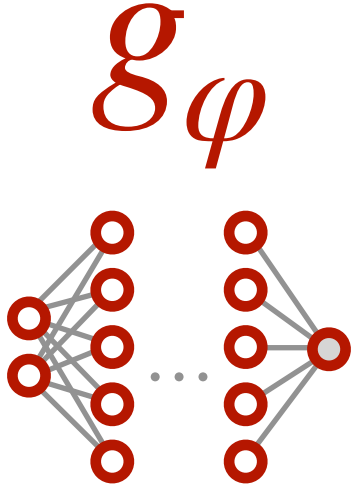
$p(x | \theta) \cdot p(\theta)$



$\theta$

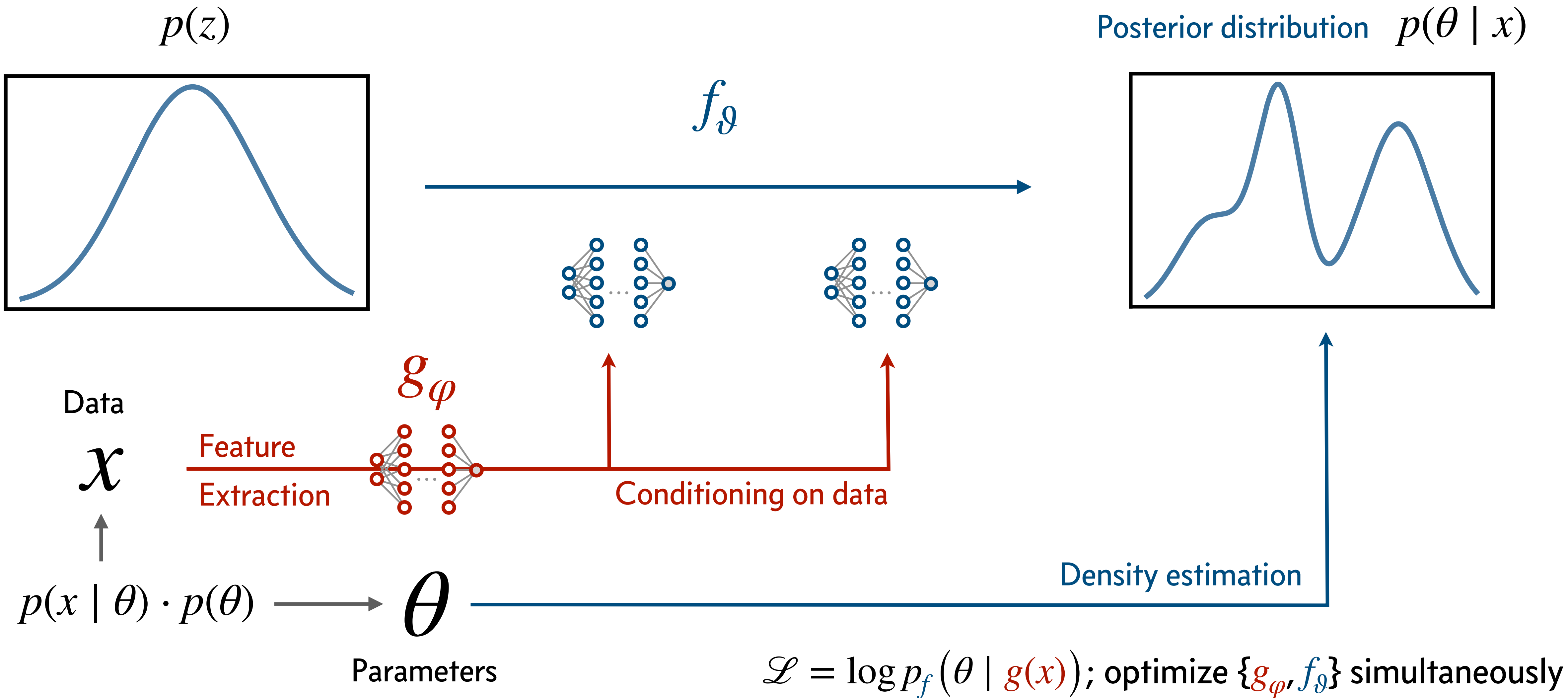
Parameters

Feature  
Extraction



# Flows in *simulation-based inference*

Flows are commonly employed as *conditional posterior density estimators* in simulation-based inference



## An application to *dwarf galaxies*

