

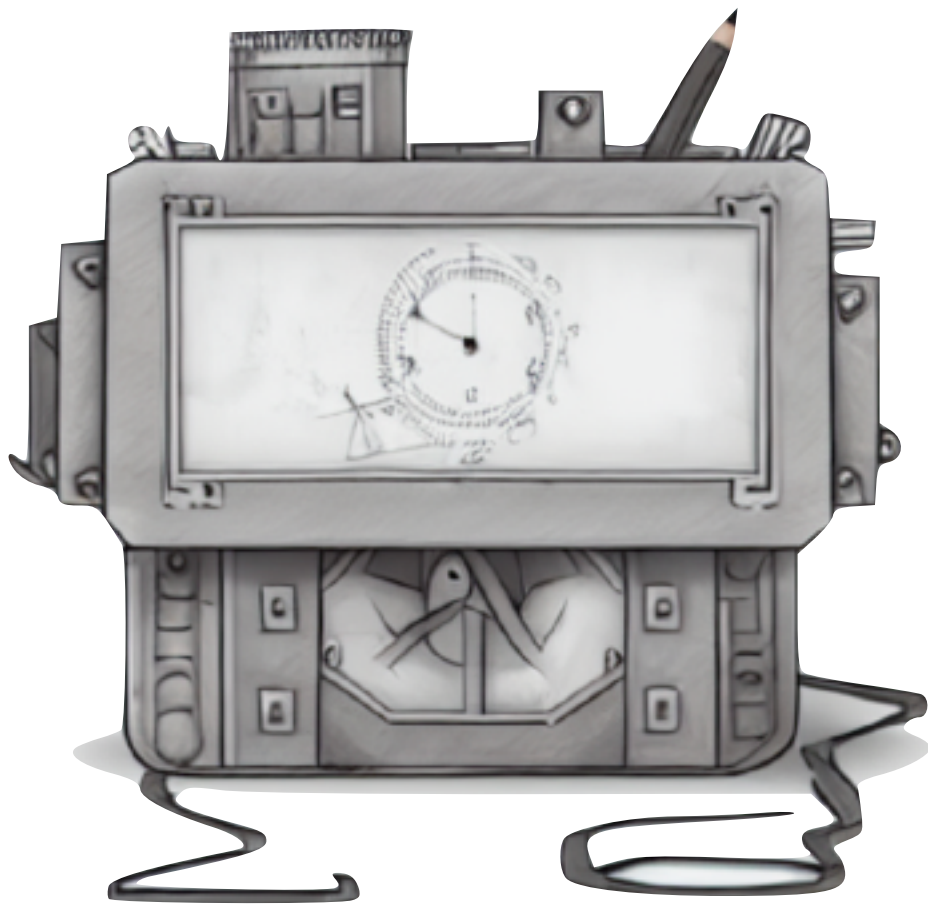


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***Sinulaya***







# Parameters

 $\theta$

# Observations

*x*



Prediction:

- Well-motivated mechanistic, causal model
- Simulator can generate samples  $x \sim p(x | \theta)$



Inference:

- Likelihood  $p(x | \theta) = \int \mathrm{d}z p(x, z | \theta)$  is intractable
- *Inference is challenging*

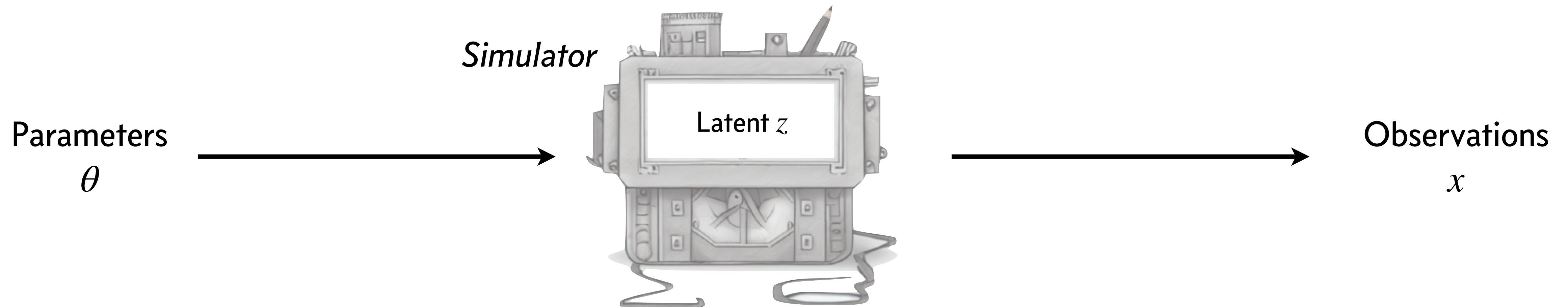
Simulation-based inference (SBI)



Latent  $z$



# Simulation-based inference (SBI)



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# Flows in *simulation-based inference*

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

