## Discrete Time Markov Process



Markov process  $(X_t)_{0 \le t \le T}$  defined by:

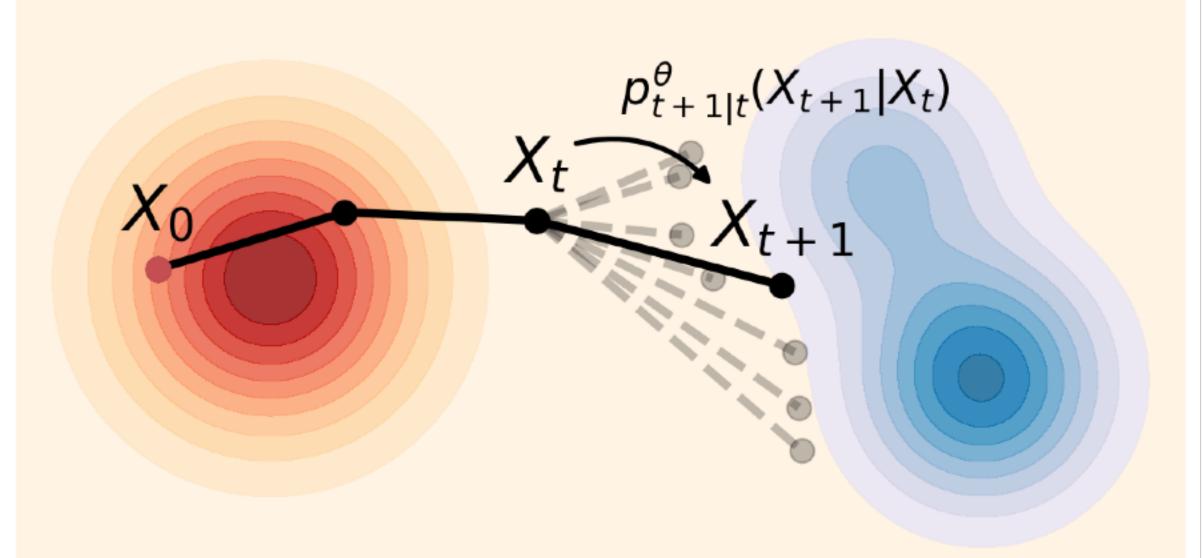
#### Transition Probability

For t in  $\{0,1,...,T-1\}$ :  $X_{t+1} \sim p_{t+1|t}^{\theta}(\cdot | X_t)$ 

And **source** distribution 
$$X_0 \sim p_0$$
.



 $p_{t+1|t}^{\theta}(\cdot | X_t)$  is a generative model



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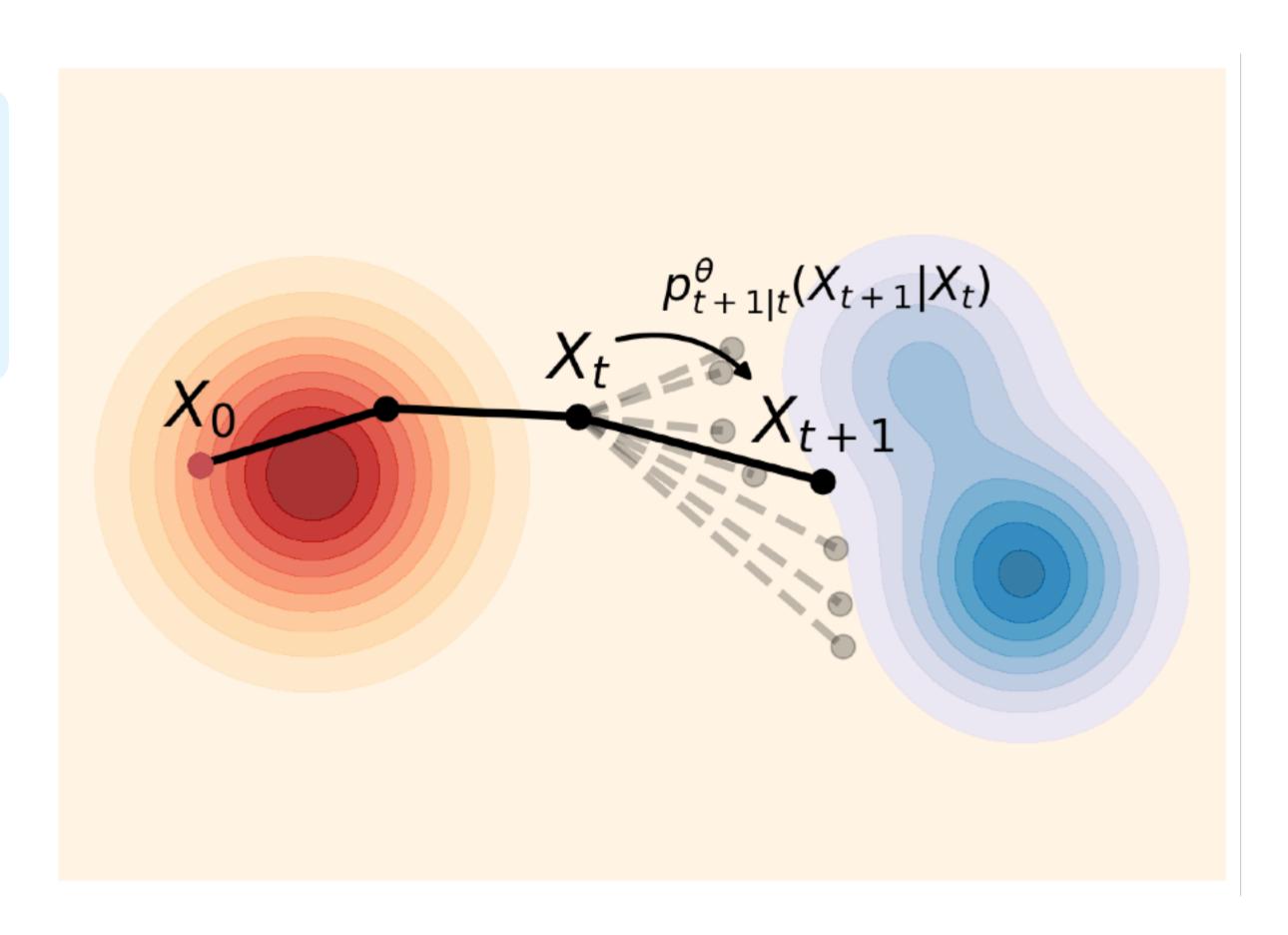
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 $p_{t+1|t}^{\theta}(\cdot | X_t)$  is a generative model



# Design Choices

Training a generative model  $p_{t+1|t}^{\theta}(X_{t+1}|X_t)$ :