An introduction to generative modeling

with applications in physics

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(smsharma.io/@kdqg1)
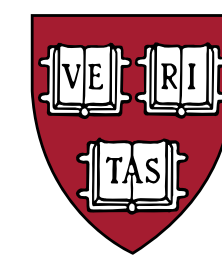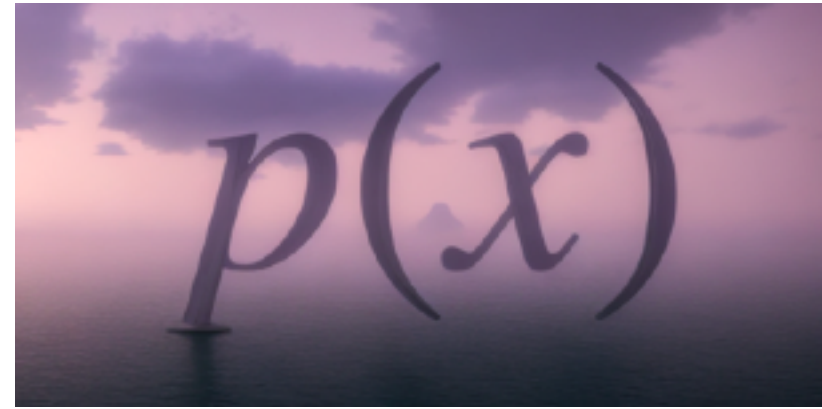
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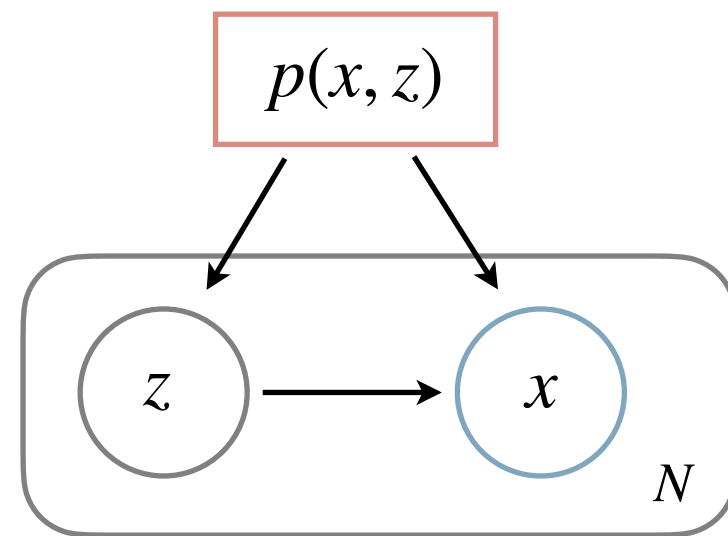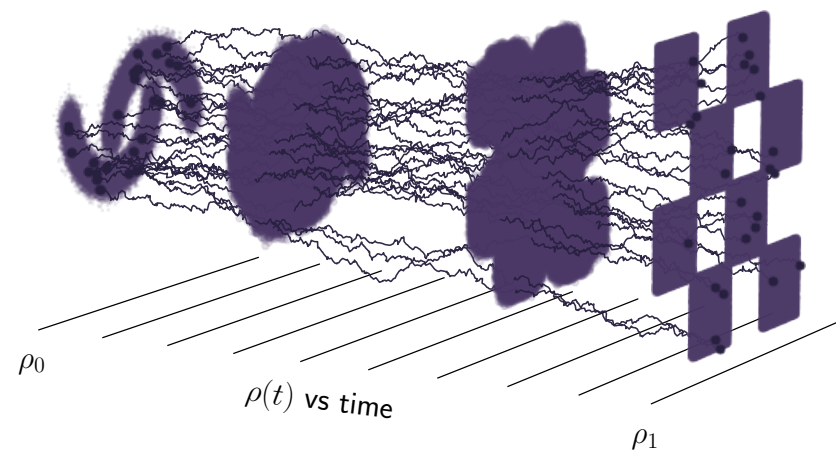
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Outline

Why (deep) generative modeling?

What is it, and what can it do for you?

Variational auto encoders

Latent-variable modeling, and compression is all you need

Diffusion models

Models based on iterative refinement

Normalizing flows (and some other models)

Invertible transformations