IAIFI Summer School

August 8, 2023

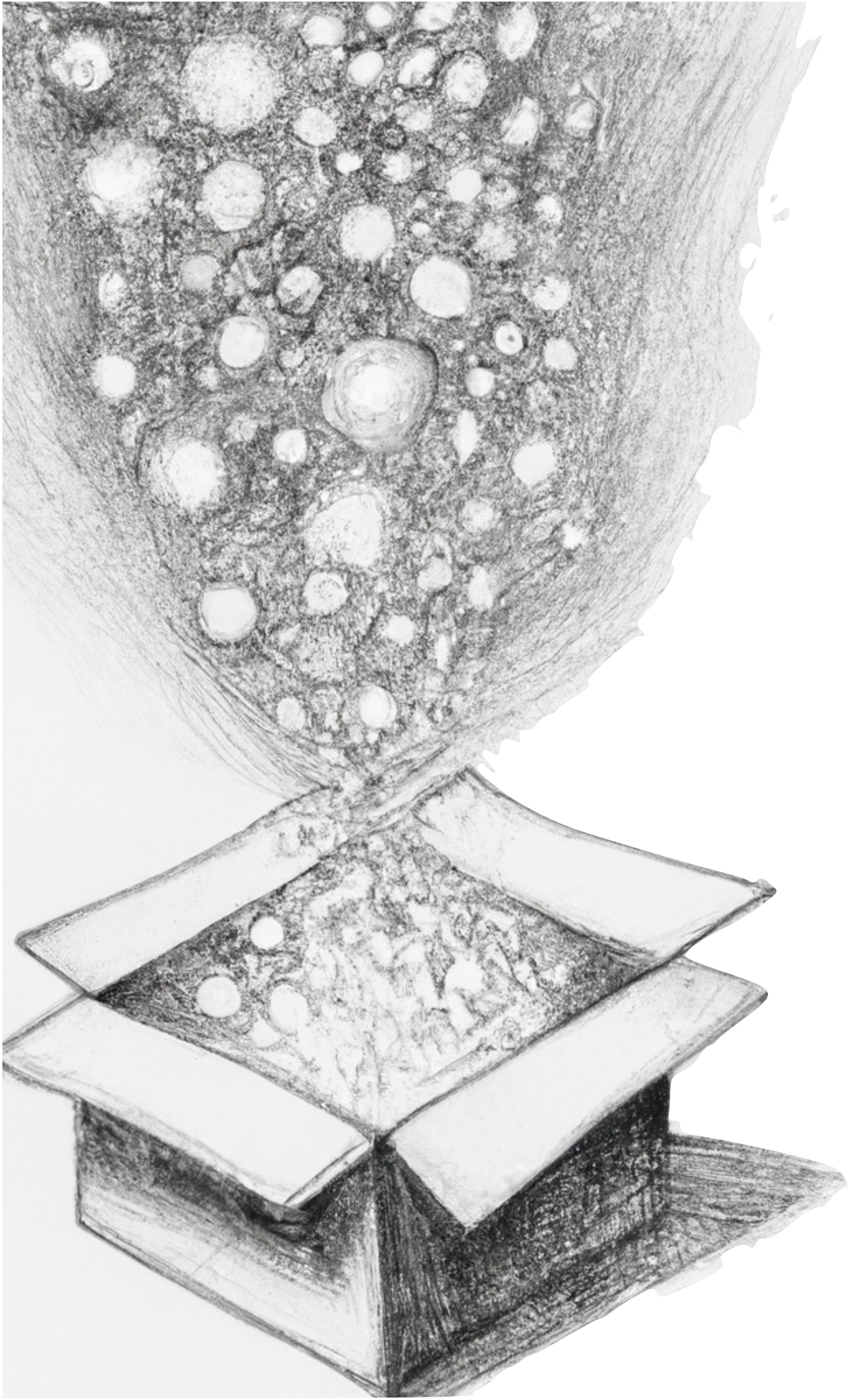
An introduction to generative modeling

with applications in physics

Siddharth Mishra-Sharma

(smsharma.io/@kdqg1)

NSF AI Institute for Artificial Intelligence and Fundamental Interactions (IAIFI)



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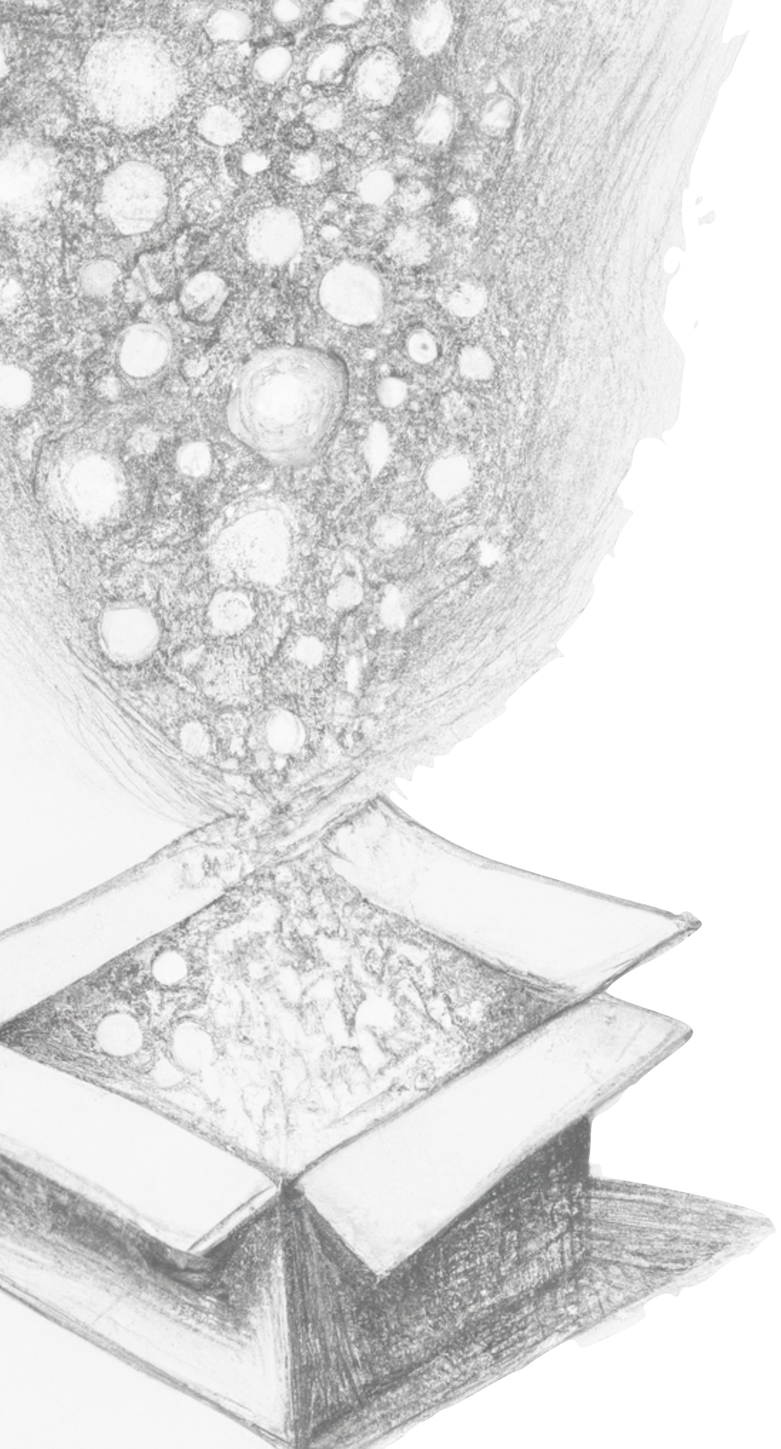

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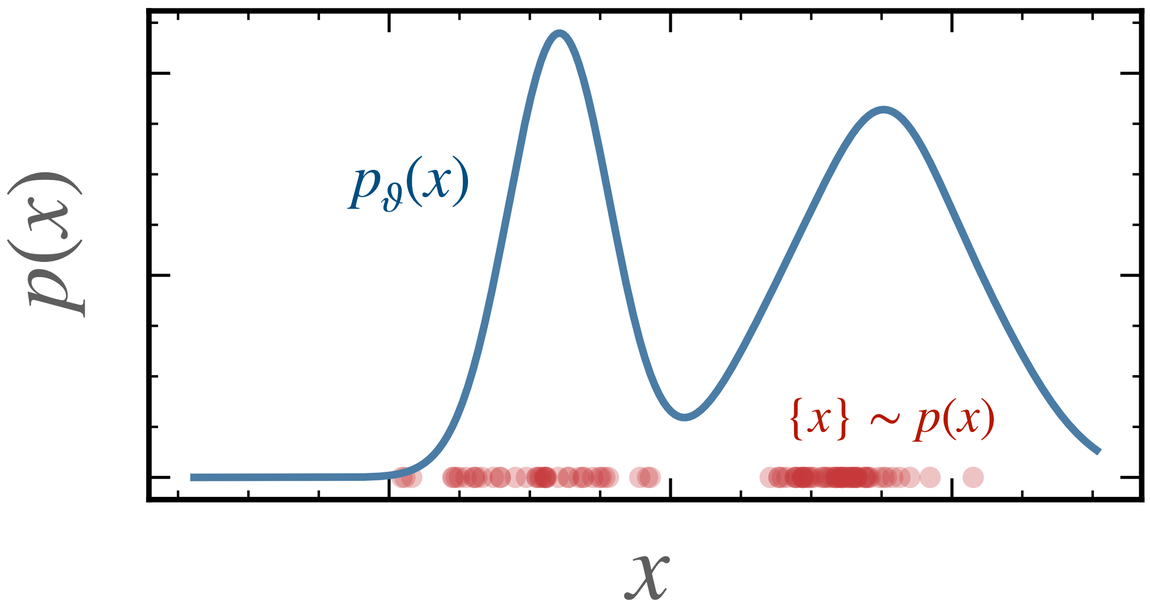
Generative models

Generative models are simulators of the data

Goal: learn a probability distribution $p_\vartheta(x)$ that is as close as possible to the true underlying data distribution $p(x)$