

Lecture notes

Yuansi Chen ([Part 1](#), [Part 2](#))

Methodology and experiments

Generative Modeling by Estimating Gradients of the Data Distribution: [Song-Ermon '19](#)

Denosing Diffusion Probabilistic Models: [Ho-Jain-Abbeel '21](#)

Score-Based Generative Modeling Through Stochastic Differential Equations:

[Song-Sohl-Dickstein-Kingma-Kumar-Ermon-Poole '21](#)

Convergence analysis

Sampling is as easy as learning the score: theory for diffusion models with minimal data assumptions: [Chen-Chewi-Li-Li-Salim-Zhang '22](#)

Nearly d -Linear Convergence Bounds for Diffusion Models via Stochastic Localization:

[Benton-De Bortoli-Doucet-Deligiannidis '24](#)

Sample complexity

Statistical Efficiency of Score Matching: The View from Isoperimetry: [Koehler-Heckett-Risteski '23](#)

Improved Sample Complexity Bounds for Diffusion Model Training: [Gupta-Parulekar-Price-Xun '24](#)