







Provide the mathematical language for describing sampling algorithms



Formally introduce distributions, statistics, Markov Kernels, etc



Provide multiple equivalent views to think about Markov kernels



Overview of the properties of Markov kernels and chains



Algorithmic



Probaristic



Algorithmic





Fundamental concepts



Convergence



GOAL FOR TODAY

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- ▶ Provide the mathematical language for discussing sampling algorithms
- ▶ Formally introduce distributions, statistics, Markov Kernels, etc
- ▶ Provide multiple equivalent views to think about Markov kernels
 - ▶ Probabilistic
 - ▶ Algorithmic
 - ▶ Algebraic
 - ▶ Markov chains
- ▶ Overview of the properties of Markov kernels and chains
 - ▶ Fundamental concepts
 - ▶ Convergence
- ▶ Fundamental recipe of MCMC

PROBABILITY DISTRIBUTIONS