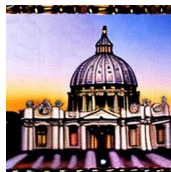
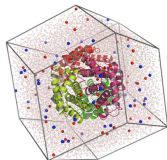
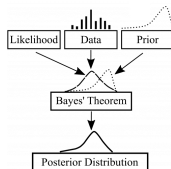


APM 51056: Probability Theory for Machine Learning

Goal:

- Master tools from probability theory essential for ML
- Applications to sampling algorithms
- Simulation from an unnormalized density π on $(\mathcal{X}, \mathcal{C})$
- Generative models



Plan for the Course:

- Lectures 1–2: Basics of integration and measure theory, application to statistics
- Lectures 4–5: Monte Carlo methods
- Lectures 5–6: Conditional distributions and Bayesian statistics
- Lectures 7–8: Markov chains and MCMC
- Lecture 9: Introduction to Generative models