Overview

1. Introduction

- Variable selection and model-X knockoffs

- Knockoff sampling is difficult

2. Characterizing knockoff distributions

- The characterization theorem

- Connection to Markov chain Monte Carlo (MCMC)

3. Metropolized knockoff sampling (Metro)

- How it works

- Time complexity and graphical structure

4. Good proposals inspired by the MCMC literature

- Covariance-guided proposal

- Multiple-try Metropolis (MTM)

5. Simulation results

6. Discussion

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