

Topic 17: False Discovery Rate (FDR) and Knockoffs

by Sai Zhang

Key points: Constructing knockoff variables to control FDR when estimating regression coefficients.

Disclaimer: *The note is built on Prof. [Jinchi Lv](#)'s lectures of the course at USC, DSO 607, High-Dimensional Statistics and Big Data Problems.*

17.1 Motivation

[Candès et al. \(2018\)](#)

References

Emmanuel J Candès, Jianqing Fan, Lucas Janson, and Jinchi Lv. Panning for gold: ‘model-x’ knockoffs for high dimensional controlled variable selection. *Journal of the Royal Statistical Society: Series B (Statistical Methodology)*, 80(3):551–577, 2018.