

# 中国科学院数学与系统科学研究院 应用数学研究所

## 华罗庚应用数学青年论坛

报告题目: Mixed-binary Convex Quadratic Optimization and Its Applications in Inference with Sparsity

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时 间: 2023年3月27日(星期一) 上午 9:00--10:30

地 点: 腾讯会议 803-304-619

摘 要: Sparsity is a naturally occurring characteristic in many real-world applications including signal denoising, outlier detection, and finance. On one hand, sparsity assumption allows people to tackle inference problems in high-dimensional settings and makes the underlying models more interpretable. On the other hand, due to the lack of convexity or even continuity, such problems are typically difficult to solve. In this talk, we will focus on the optimization side and understand the sparse inference problem from the perspective of mixed-integer nonlinear programming. In particular, we will discuss problem modeling, its solvability, and computations.

个人简介: 现为南加州大学博士后(合作导师为美国工程院院士 Jong-Shi Pang)。本科毕业于中国科技大学, 2022年博士毕业于南加州大学。主要研究方向为混合整数规划、非线性优化、机器学习等。研究成果发表于 Mathematical Programming, SIAM Journal on Optimization, Journal of Machine Learning Research 等。