

数学与系统科学研究院

计算数学所学术报告

报告人: **Dr. Xiaojing Ye**

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报告题目:

**Learning to Match: An Inverse
Optimal Transport Approach**

邀请人: 陈冲 博士

报告时间: **2019 年 5 月 28 日 (周二)**

下午 15:00-16:00

报告地点: **数学院南楼二层**

202 教室

Abstract:

We propose a unified data-driven framework based on inverse optimal transport that can learn adaptive, nonlinear interaction cost function from noisy and incomplete empirical matching matrix and predict new matching in various matching contexts. We emphasize that the discrete optimal transport plays the role of a variational principle which gives rise to an optimization based framework for modeling the observed empirical matching data. Our formulation leads to a bi-level non-convex optimization problem, for which we develop an efficient algorithm based on a saddle-point formulation of the optimization problem. The proposed approach has wide applicability including predicting matching in online dating, labor market, college application and crowdsourcing. We back up our claims with numerical experiments on both synthetic data and real world data sets.

欢迎大家参加！