中国科学院数学与系统科学研究院
Academy of Mathematics and Systems Science, CAS

图论组合与网络研究中心

Center for Graph Theory, Combinatorics and Networks

学术报告

题　　目： **Monotone principle for approximation algorithm design and analysis**

报告人： 杜东雷 教授，University of New Brunswick

时　　间： 11 月 6 日（星期一） 10: 00 – 11: 00

地　　点： 数学院南楼 N620

摘　　要： We propose a systematical framework for approximation algorithm design and analysis via the principle of monotonicity. Some immediate benefits of the approach include: (i) unifying many existing algorithms; (ii) providing a guideline to design and analyze new algorithms; and (iii) offering new perspectives to potentially improve existing algorithms.

个人简介： Donglei Du is a professor in Quantitative Method and Quantitative Investment Management at the Faculty of Management (FOM), University of New Brunswick (UNB), Canada. He received his PhD degree in Computer Science from University of Texas at Dallas in 2003 and another PhD degree in Operations Research from the Institute of Applied Mathematics, Chinese Academy of Science in 1996. His main research interests are Quantitative Investment Management, Quantitative Finance, FinTech (Blockchain and cryptocurrencies) Operations Research, Algorithmic trading, Combinatorial Optimization, Approximations algorithms, Robust optimization, Social Network Analysis, Algorithmic Game Theory, Supply Chain Management, Facility Location, and Machine Scheduling. Dr. Du's publications have appeared in top-tier journals, including Operations Research, Algorithmica, SIAM Journal on Discrete Mathematics, European Journal of Operation Research and Omega.