



# Greater Bay Area Workshop on Optimization Under Uncertainty

Date and Time: May 11, 9 am to 5:30 pm

Venue: CPD-2.58, The Jockey Club Tower,  
Centennial Campus, HKU

## Abstract

Optimization problems often involve dealing with uncertainty, which can arise from various sources such as incomplete information, stochastic valuations, and unpredictable interactions. Recent advances provide inspiring algorithms and techniques on contract design, mechanism design, online assignment, online selection, etc., exploring how uncertainty affects the complexity and hardness of optimization problems and investigating the trade-offs between computational efficiency and approximation ratio.

This workshop will foster discussions on some exciting achievements in optimization problems under uncertainty. The presentations will overview leading results and techniques in classic problems including balls in bins, prophet inequality, Pandora box problem, etc. We hope that participants will leave with a deeper understanding of the challenges and opportunities in this field, and with new ideas for tackling these problems in their own research.

## Overseas Speakers:



### Nikhil Bansal

Patrick C. Fischer Professor  
of Theoretical Computer Science  
University of Michigan



### Shang-Hua Teng

University Professor and Seeley G.  
Mudd Professor of Computer Science  
and Mathematics  
University of Southern California

## Invited Speakers:

### Yilun Chen

The Chinese University of Hong Kong, Shenzhen

### Hu Fu

Shanghai University of Finance and Economics

### Jiashuo Jiang

Hong Kong University of Science and Technology

### Shi Li

Nanjing University

### Zhihao Tang

Shanghai University of Finance and Economics

### Zizhuo Wang

The Chinese University of Hong Kong, Shenzhen

### Xiaowei Wu

University of Macau

### Yuhao Zhang

Shanghai Jiao Tong University