



# Facility Location Games



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Venue : Room PQ703, 7/Floor, Core P, Mong Man Wai Building,  
The Hong Kong Polytechnic University

### ► Abstract

Mechanism Design, as one of the important areas in algorithmic game theory, can be classified into two categories: with money and without money. Facility location game is one of the mostly studied problem in mechanism design without money. Procaccia and tennenholtz proposed and studied the problem back in 2009, where there are  $n$  agents on a line and the government will build a facility in a certain location given the agents' reported information on their positions. Since every agent wants the facility to be closer to her, the government wants to make sure truth telling is the best strategy for every agent while achieving some optimization objective. Since then, some bounds on the approximation ratios of the truthful mechanisms have been improved and new models are proposed. In this talk, we will briefly explain the story of the classic model and emphasize on the recent progress on new models proposed by us.

### ► About the Speaker

Minming Li is currently an associate professor in the Department of Computer Science, City University of Hong Kong. He received his Ph. D. and B.E. degree in the Department of Computer Science and Technology at Tsinghua University in 2006 and 2002 respectively. His research interests include algorithmic game theory, combinatorial optimization and algorithm design and analysis for scheduling problems.

### *ALL are welcome!*

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