



## The Hong Kong Polytechnic University Department of Applied Mathematics

## Colloquium

Semidefinite relaxation methods for completely positive optimization

by

## **Prof. Jinyan Fan**

Shanghai Jiaotong University, Shanghai, China

## **Abstract:**

Completely positive (CP) matrices have wide applications in combinatorics and statistics. Many NP-hard problems can be formulated as linear optimization problems over the cone of CP matrices. In this talk, we overview the semidefinite relaxation methods for the CP decomposition problem, the CP completion problem and the CP approximation problem. Some other related topics will also be discussed.

**Date: 26 July 2019 (Friday)** 

Time: 13:45--14:45

Venue: TU801, The Hong Kong Polytechnic University

\* \* \* ALL ARE WELCOME \* \* \*