THE UNIVERSITY   **OF HONG KONG**

Department of Mathematics

Student Seminar

May 23, 2018 (Wednesday)
Room 210, Run Run Shaw Bldg., HKU

Mr. Haotian Gu

The University of Hong Kong

Efficient Numerical Methods to Solve G-Equations
Using Proper Orthogonal Decomposition

4:00 – 4:45pm

In this research, we for the first time design an efficient numerical method to solve *G*-equations using Proper Orthogonal Decomposition (POD). In our numerical experiments, we show that our POD method can significantly reduce the computational cost of solving *G*-equations while its numerical error is relatively small.

Mr. Lexiao Lai

The University of Hong Kong

Gradient Schemes in Convex Optimization:
Adaptive Restart Improvements and Applications

4:45 – 5:30pm

In this presentation, the speaker will present the project he has finished in the past semester. He'll first introduce some gradient schemes in convex optimization and then do convergence analysis of some algorithms. Gradient mapping methods will also be discussed to generalize the gradient methods. Finally, some applications and numerical experiments will be presented.

All are welcome