

THE HONG KONG UNIVERSITY OF SCIENCE & TECHNOLOGY

Department of Mathematics

SEMINAR ON APPLIED MATHEMATICS

Interlacing polynomials and their applications

By

Prof. Zhiqiang XU

Academy of Mathematics and System Science, Chinese Academy of Sciences, Beijing

<u>Abstract</u>

Recently, A. W. Marcus, D. A. Spielman, and N. Srivastava have applied the interlacing polynomial method to solve the Kadison-Singer problem. We have made progress in several problems in data science using this method, including matrix column subset selection problem and matrix discrepancy problem. We will give a brief introduction to this method and its applications in data science.

Date : 03 June 2024 (Monday) Time : 10:00a.m.-11:00a.m. Venue : Room 1409 (near Lift 25/26)

All are Welcome!