



THE HONG KONG UNIVERSITY OF SCIENCE & TECHNOLOGY

Department of Mathematics

SPECIAL COLLOQUIUM

Mathematics in Data Science

By

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Abstract

We are living in the era of big data, where extracting, interpreting, and applying the vast knowledge embedded in data can greatly benefit society and improve daily life. However, the sheer complexity of collected data, coupled with high expectations—particularly in fields like artificial intelligence—presents both significant challenges and promising opportunities, especially for mathematical sciences.

In this talk, we will explore concrete examples in data science and AI, drawing from the speaker's research on the mathematical foundations of data science and its applications in image and video processing. We will demonstrate how mathematics has played a critical role in advancing data science and discuss how it can drive future innovations. Additionally, we will highlight key challenges mathematicians face in this rapidly evolving, data-driven landscape.

Date : 28 April 2025 (Monday)

Time : 4:00p.m. – 5:00p.m.

Venue : Room 2405 (near Lift 17 & 18)

All Are Welcome!