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THE HONG KONG UNIVERSITY OF SCIENCE & TECHNOLOGY

Department of Mathematics

SPECIAL COLLOQUIUM

A cumulant approach to linear regression

By

Prof. Ming YUAN

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Abstract

Linear regression is a cornerstone of statistics. Despite its generality and flexibility, its interpretation can be subtle. In this talk I will describe a new perspective to linear regression through the lens of higher order cumulants and discuss how it offers new insights into a number of classical problems including the omitted variable bias.

Bio: *Prof. Ming Yuan is the Associate Director of Data Science Institute at Columbia University. He is a renowned statistician and has made original contributions to high-dimensional statistics, graphical model, non-parametric statistics and tensor data analysis. Prof. Yuan was the Co-Editor of The Annals of Statistics during 2019-2021. He has received numerous awards including the 2014 Guy Medal in Bronze from Royal Statistical Soceity, 2017 Leo Breiman Junior Award from ASA, 2018 Medallion Lecture from IMS, and Senior Fellow at ETH Zurich 2022.*

Date : 30 July 2025 (Wednesday)
Time : 3:00p.m. – 4:00p.m.
Venue : Lecture Theatre F

All Are Welcome!