



Department of Mathematics
The Chinese University of Hong Kong

數學系
香港中文大學

Phone: (852) 3943 7988 / 3943 7989 • Fax: (852) 2603 5154 • Email: dept@math.cuhk.edu.hk
Rm. 220, Lady Shaw Building, The Chinese University of Hong Kong, Shatin, N.T., Hong Kong

Colloquium

Some Recent Developments in Harmonic Analysis

Professor Po Lam Yung
Australian National University and
The Chinese University of Hong Kong

Abstract: I'll explain some work with my collaborators on Sobolev spaces and on Fourier decoupling. It will feature some new ways with which we can compute the L^p norm of the derivative of a function, and some estimates that capture destructive interference between waves that propagate in different directions. Applications will be given in numerical approximations, PDEs, and analytic number theory. Efforts will be made to make this talk accessible to a wide audience.

Joint work with Haim Brezis, Oscar Dominguez, Qingsong Gu, Shaoming Guo, Zane Kun Li, Andreas Seeger, Brian Street, Jean Van Schaftingen, and Pavel Zorin-Kranich.

Date: Monday, 10 July 2023
Time: 10:30 am – 11:30 am
Venue: Room 222, Lady Shaw Building,
The Chinese University of Hong Kong, Shatin

All are Welcome!