THE UNIVERSITY **OF HONG KONG**

Department of Mathematics

Departmental Seminar

Inverse Problems in Hyperspectral Imaging

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Abstract

Hyperspectral imaging camera measures electromagnetic energy scattered in their instantaneous field view in hundreds or thousands of spectral channels with higher spectral resolution than multispectral/RGB cameras.

Hyperspectral remote sensing plays a fundamental role in earth observation. Its high spectral resolution enables material identification via spectroscopic analysis, which leads to countless applications, such as precision agriculture and production monitoring, forest inventories and forest health assessments, water quality assessment, geological mapping, and so on. This talk will give a brief overview of hyperspectral imaging in remote sensing, including the observation model, degradation mechanisms (spatial blur and noise), characterization of hyperspectral images (geometrical and statistical properties), and several typical inverse problems (namely, denoising, sharpening, and unmixing).

Date: December 17, 2021 (Friday)

Time: 10:15 - 11:15am

Venue: Room 210, Run Run Shaw Bldg., HKU

Attendance limited
Register Now

All are welcome