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Room 220, Lady Shaw Building, The Chinese University of Hong Kong, Shatin, N.T., Hong Kong

# Colloquium

## *Scattering by curvatures, radiationless sources, non-radiating waves and transmission eigenfunctions, and beyond*

**Professor Hongyu Liu**  
Hong Kong Baptist University

### Abstract

In this talk, the speaker shall talk about their recent research on scattering by curvatures and the localization and geometrization phenomena in wave scattering. The results enable us to geometrically characterize invisible objects, which in turn can be used to classify visible and invisible objects.

### Introduction

Hongyu Liu is currently an Associated Professor and Associated Head of the Department of Mathematics, Hong Kong Baptist University. He has been promoted to Professor starting from September 2018. Before moving to HKBU, he was an Assistant Professor at University of North Carolina, Charlotte, USA (2011-2014), and Acting Assistant Professor at University of Washington, Seattle, USA (2007-2010). Professor Liu's research focuses on inverse problems and imaging, partial differential equations, mathematical materials science and scattering theory. He has published more than 90 research papers and one joint research monograph. He was awarded the Calderon Prize by Inverse Problems International Association in 2017 and The MediaV Young Researcher Prize at ICIP in Seoul, Korea in 2016.

Date: 1 August 2018 (Wednesday)  
Time: 4:00pm - 5:00pm  
Venue: Room 222, Lady Shaw Building,  
The Chinese University of Hong Kong, Shatin

*All are Welcome*