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# Analysis Seminar

## **Exact dimensionality of Mandelbrot cascades acting on ergodic measures and dimension of projections**

*Professor Xiong Jin*

Department of Mathematics  
University of Manchester

**Abstract:** In this talk we will show that the push-forward measures of Mandelbrot cascades acting on ergodic measures on symbolic spaces mapped through canonical mapping of one-dimensional iterated functions systems are exact-dimensional. We shall also extend this result to skew product symbolic spaces and apply this to obtain an extension of Hochman and Shmerkin's projection theorem on product of time 2 and time 3 invariant measures.

Date: 18 February 2023 (Saturday)  
Time: 9:30 a.m. – 10:30 a.m.  
Venue: Rm 222, Lady Shaw Building,  
The Chinese University of Hong Kong, Shatin

*All are Welcome!*