

Department of Mathematics **The Chinese University of Hong Kong** 



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## When Fuglede meets Gabor

## **Professor Chun-Kit LAI** San Francisco State University

## <u>Abstract</u>

We study when a set *K* can form a Gabor orthonormal basis GONB) for  $L^2(\mathbb{R}^d)$ . It is easy to prove that if *K* is both a spectral set and a translational tile, then *K* can be used to produce GONB. In this talk, we study whether the converse holds. Spectral sets and tiles were conjectured to be the same by Fuglede, but we will demonstrate that this Fuglede-Gabor problem is more delicate even in some simple cases.

Date :	December 19, 2017 (Tuesday)
Time :	2:30p.m. – 3:30p.m.
Venue :	Room 222, Lady Shaw Building
	The Chinese University of Hong Kong