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Seminar

On the Sets of Uniqueness for Trigonometric Series

by

Professor Ying Xiong
South China University of Technology

Abstract:

In this talk, we will introduce some known results about the sets of uniqueness of trigonometric series. A subset E of the real line is said to be a set of uniqueness if every trigonometric series converging to 0 outside E vanishes identically. The study of sets of uniqueness originated from the work of Riemann, Heine and Cantor. A fundamental problem is to find a necessary and sufficient condition for a perfect set to be a set of uniqueness. In 1950's, Salem and Zygmund gave a partial answer to this problem for homogeneous self-similar sets. Recently, Varju and Yu completely identified all self-similar sets which are sets of uniqueness.

Date : August 6, 2021 (Friday)

Time : 2:30pm to 3:30pm

Venue : Room 222, Lady Shaw Building, CUHK

All are Welcome