

THE UNIVERSITY



OF HONG KONG

*Institute of Mathematical Research
Department of Mathematics*

Number Theory Seminar

Different aspects of Piltz Divisor Functions with Congruence Conditions

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Abstract

In this talk, we explore the Piltz divisor function, where the divisors are subject to certain congruence conditions. We'll investigate how the error term behaves when summed via the Riesz method, with a focus on its sign changes. Our main goal is to establish lower bounds on the number of sign changes in a given interval. Finally, we will identify the shortest interval in which at least one sign change occurs. This is a joint work with K. Khurana and A. Roy.

Date: January 22, 2026 (Thursday)
Time: 1:00 pm - 2:00 pm
Venue: Room 210, Run Run Shaw Building, HKU

All are welcome