THE HONG KONG UNIVERSITY OF SCIENCE & TECHNOLOGY

Department of Mathematics

MATHEMATICS COLLOQUIUM

The Small divisor problem in classical and quantum mechanics

By

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Abstract

The central issue in dynamics is stability, whose microscopic mechanism lies in resonance phenomena, with small divisors serving as the fundamental mathematical manifestation of resonance. If small divisors are effectively controlled, the system exhibits macroscopic stability; conversely, instability emerges. This talk will discuss the small divisor problems arising in particle dynamics, fluid mechanics, and quantum mechanics, and briefly introduce some of our recent research progress in these directions.

Date : 6 February 2026 (Fri)

Time : 3:00pm - 4:00pm

Venue : Lecture Theatre F (Lift 25/26)

All Are Welcome!