



復旦大學
FUDAN UNIVERSITY

Applied Math
Ph.D. Seminar

Plane wave approximations for incommensurate systems

Speaker: Ting Wang

(Chinese Academy of Sciences)

Time: 2024-05-30, 16:10 to 17:00

Location: Rm 1801, Guanghua East Tower

Advisor: Aihui Zhou

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Abstract: In this work, we focus on the physical observables of continuum Schrödinger operators for incommensurate systems. We characterize the density of states in both real and reciprocal spaces. Specifically, we justify the thermodynamic limit of the density of states, and propose efficient numerical schemes based on planewave approximation. We present both rigorous analysis and numerical simulations to support the reliability and efficiency of our numerical algorithms.