



THE HONG KONG UNIVERSITY OF SCIENCE & TECHNOLOGY

Department of Mathematics

SEMINAR ON PDE

Spectral properties of Levy Fokker-Planck equations

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Abstract

We study the spectrum of a fractional Laplacian equation with drift in suitable weighted spaces. This operator arises when studying the fractional heat equation in self-similar variables. We show, in the radially symmetric case, compactness, and then calculate the eigenfunctions in terms of Laguerre polynomials. The proofs involve Mellin transform and complex analysis methods. This is joint work with H. Chan, M. Fontelos and J. Wei.

Date: 24 March 2023 (Friday)

Time: 5:00pm

Zoom Meeting: <https://hkust.zoom.us/j/93473310348> (Passcode: 692453)

All are Welcome!