THE HONG KONG UNIVERSITY OF SCIENCE & TECHNOLOGY

Department of Mathematics

SEMINAR ON PDE

Nonlinear nonlocal potential theory at the gradient level

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Abstract

We present pointwise gradient potential estimates for a class of nonlinear nonlocal equations related to strongly convex nonlocal energy functionals. Our pointwise estimates imply that the first-order regularity properties of such general nonlinear nonlocal equations coincide with the sharp ones of the fractional Laplacian. The talk is based on joint work with Lars Diening, Kyeongbae Kim and Ho-Sik Lee.

Date: **14 March 2024 (Thursday)**

Time: **4:00pm**

Zoom Meeting: **https://hkust.zoom.us/j/99697396030** **(Passcode: 231607)**

All are Welcome!