



THE HONG KONG UNIVERSITY OF SCIENCE & TECHNOLOGY

Department of Mathematics

SEMINAR ON PDE

Regularity of the trace of nonlocal minimal graphs

Prof. Serena Dipierro

The University of Western Australia

Abstract

Nonlocal minimal surfaces are the fractional counterpart of the classical minimizers of the perimeter functional. A special subclass is given by nonlocal minimal graphs, namely nonlocal minimal surfaces that possess a graphical structure. Because of the presence of long-range interactions, nonlocal minimal graphs behave quite differently from their classical analogues, most notably through the typical appearance of boundary discontinuities. Nevertheless, nonlocal minimal graphs remain continuous from the interior up to the boundary of the reference domain, and therefore admit a boundary trace. In this talk, we discuss regularity properties of the trace of nonlocal minimal graphs at points of stickiness.

Date: 16 April 2026 (Thursday)

Time: 4:00pm

Zoom Meeting: <https://hkust.zoom.us/j/93569495878> (Passcode: 801558)

All are Welcome!