Department of Mathematics
The Chinese University of Hong Kong

數學系
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Inverse Problems Seminar

Some results on inverse problems to elliptic PDEs with solution data and their implications in operator learning

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Abstract

In recent years, there have been great interests in discovering structures of partial differential equations from given solution data. Very promising theory and computational algorithms have been proposed for such identification problems in different settings. We will try to review some recent understandings of such PDE learning problems from the perspective of inverse problems. In particularly, we will highlight a few computational and analytical understandings on learning a second-order elliptic PDE from single and multiple solutions.

Date: 13 October 2022 (Thursday)
Time: 9:00am – 10:00am (Hong Kong Time)
ZOOM link: https://cuhk.zoom.us/j/98241093146
Meeting ID: 982 4109 3146

All are Welcome