

Applied Math Ph.D. Seminar

A non-local mean field control modelling complex sub-diffusive transport

Speaker: Zhiwei Yang (Fudan University)

Time: 2024-04-18, 16:10 to 17:00

Location: Rm 1801, Guanghua East Tower

Advisor: Jin Cheng (Fudan University)

Abstract: A non-local mean-field control (MFC) is developed for a prototype model of accidental spill of a hazardous contaminant in subsurface porous media. Numerical experiments are presented to investigate the performance of the MFC, which show that the MFC determines an optimal flow pattern to ensure clean groundwater supply during and beyond the time period of contaminant spill with minimal cost.