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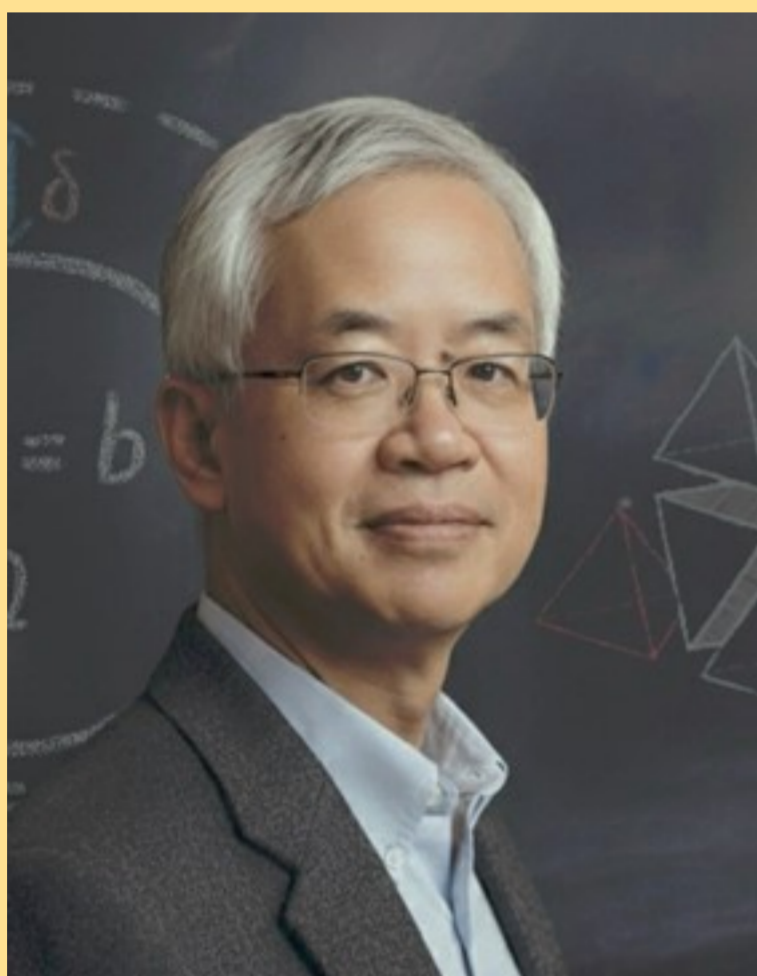
City University of Hong Kong

Integral models with nonlocal operators: applications and recent developments

by

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Abstract

Recent applications and theoretical developments of integral models using nonlocal operators have shown promise as effective alternatives to local models, especially in the presence of singularities and anomalies. These models also serve as continuum limits for large-scale discrete models used in data learning and network analysis. In this talk, we give an overview of some progress on models involving a finite range of interactions. For problems defined on bounded domains, we discuss various options for modeling the nonlocal interactions both in the interior domain and on the boundary. We also present recent advances in the mathematical and numerical analysis of these problems, as well as their applications.



Registration

Date : Monday, 12 January 2026

Time : 11:00 am

Venue : Room 1310, Li Dak Sum Yip Yio Chin A Bldg

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