

THE UNIVERSITY



OF HONG KONG

*Institute of Mathematical Research  
Department of Mathematics*

# Numerical Analysis Seminar

## Nonlocal multicontinua with representative volume

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### Abstract

In this talk, we present a general derivation of multicontinuum equations and discuss cell problems. We present constraint cell problem formulations in a representative volume element and oversampling techniques that allow reducing boundary effects. We discuss different choices of constraints for cell problems. We present numerical results that show how oversampling reduces boundary effects. Finally, we discuss the relation of the proposed methods to our previously developed methods, Nonlocal Multicontinuum Approaches.

Date:	October 12, 2023 (Thursday)
Time:	3:00 – 4:00pm
Venue:	Rm 210, Run Run Shaw Bldg., HKU

*All are welcome*