

THE UNIVERSITY



OF HONG KONG

*Institute of Mathematical Research  
Department of Mathematics*

## Numerical Analysis Seminar

**From the Glowinski-Le Tallec splitting in  
Lagrangian optimization to approximations of  
nonlinear Kawarada equation solutions**

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### **Abstract**

This study delves into the profound Glowinski-Le Tallec formula and its applications to the numerical solution of a family of important partial differential equation initial-boundary value problems. It will be shown in our straightforward mathematical analysis that the nonconventional splitting method provides not only an effective enhancement to traditional decomposition strategies, but also a more flexible way for multi-parameter splitting operator configurations for approximating solutions of multidimensional nonlinear partial differential equations.

Date: January 14, 2025 (Tuesday)
Time: 4:00 pm – 5:00 pm
Venue: Room 210, Run Run Shaw Building, HKU

*All are welcome*