THE HONG KONG POLYTECHNIC UNIVERSITY
香港理工大學

DEPARTMENT OF APPLIED MATHEMATICS
應 用 數 學 系

Department of Applied Mathematics Seminar

Professor David COHEN

Chalmers University of Technology & University of Gothenburg, Sweden

Topic

Stochastic conformal integrators for linearly damped stochastic Poisson systems

Date| Time

20 October 2025 (Monday) | 10:00 – 10:50 (HK Time)

Venue

TU717

Abstract:

We propose and study conformal integrators for linearly damped stochastic Poisson systems. We analyze the qualitative and quantitative properties of these numerical integrators: preservation of dynamics of certain Casimir and Hamiltonian functions, almost sure bounds of the numerical solutions, and strong and weak rates of convergence under appropriate conditions.

ALL ARE WELCOME