



Department of Mathematics
The Chinese University of Hong Kong

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數學系
香港中文大學

Phone: (852) 3943 7988-9 • Fax: (852) 2603 5154 • Email: dept@math.cuhk.edu.hk
Rm. 220, Lady Shaw Building, The Chinese University of Hong Kong, Shatin, N.T., Hong Kong

Applied Math and Numerical Analysis Seminar

Kinetic Models for Semiflexible Polymers in a Half-plane

by

Professor Jin Woo JANG
Pohang University of Science and Technology

Abstract :

In this talk, we introduce a derivation of a kinetic equation for semi-flexible polymers. The equation describes the limiting behavior of a N -segment discrete chain via the continuum-limit. In the half-plane, we also present a formal derivation of the trapping boundary condition by assuming the energy-minimizing transition of a segment at the boundary. Then we will briefly introduce the proof of global well-posedness, long-time asymptotic behavior, hypoellipticity, and the Hölder regularity of solutions near the boundary.

Date :	March 27, 2024 (Wednesday)
Time :	2:00pm – 3:00pm (Hong Kong SAR)
Zoom link:	https://cuhk.zoom.us/j/9792985952
Passcode:	202266

All are Welcome