

THE UNIVERSITY



OF HONG KONG

*Institute of Mathematical Research
Department of Mathematics*

Numerical Analysis Seminar

Energy stable methods for phase-field surfactant model and simulation of droplet impact

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Abstract

We develop energy stable and bound preserving schemes for phase-field surfactant model with moving contact lines. The desired properties of the schemes are rigorously proved. We numerically validate the accuracies of the schemes and apply them in simulating droplet impact problems. Qualitative agreements with experiments are obtained. Moreover, surfactants are observed to have effects on enhancing droplet deformation and reducing dissipations.

Date:	March 1, 2023 (Wednesday)
Time:	15:00pm - 16:00pm
Venue:	ZOOM: https://hku.zoom.us/j/
	Meeting ID: 913 6532 3891
	Password: 310656

All are welcome