THE UNIVERSITY



OF HONG KONG

Department of Mathematics

Numerical Mathematics and Applied Analysis Group Seminar (NMAA)

Immersed Boundary Method for Interfacial Flows with Surfactant

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> on Thursday, March 7, 2013 at 2:30pm in Room 210, Run Run Shaw Building, HKU

Abstract

In this talk, we will introduce an immersed boundary method and its applications to simulate two-phase flows with soluble or insoluble surfactant. In particular, a conservative scheme for solving coupled surface-bulk convection-diffusion equations will be introduced in detail. The effects of solubility of surfactant on drop deformations in a quiescent and shear flow will be investigated in detail.

All are welcome