

THE CRM APPLIED MATHEMATICAL AND PHYSICS (CAMP) SEMINARS



CENTRE DE RECERCA MATEMÀTICA

Huaxiong Huang

York University of Canada

Immersed boundary methods for problems with moving interfaces

Abstract:

Immersed Boundary (IB) Method was first developed by Perskin in the 1970s. It has been used extensively for fluid flow problems with moving interfaces and fluid-solid interaction problems.

In this talk, I will present some of the recent work related to the IB method. I will first talk about the application of the IB method to study endocytosis and show that fluid dissipation has a large role to play and cannot be ignored. I will also present a new IB formulation for restricted mass transport through a permeable interface, such as the membrane of a biological cell, which is immersed in fluid flow.

This talk is based on joint work with my former postdoc YH Tseng and research collaborators X. Gong, Z. Gong from Shanghai Jiaotong University.

Date:	March 27, 2014
Place:	Room C1/028
Time:	12:00

