

**Department of Mathematics
City University of Hong Kong**

Colloquium

Organised by Prof. Tong Yang and Dr. Xiang Zhou

Three Forward PDE Problems with Urgent Need of Data Assimilation

by

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Abstract :

I discuss three very different forward PDE problems which need data assimilation/inverse approaches to make them potentially useful in practical applications. The first problem is a reaction-diffusion system for biological transportation network formation and adaptation, the second is a highly nonstandard parabolic free boundary problem describing price formation in economic markets and the third problem is the incompressible Navier-Stokes-Forchheimer-Brinkmann system for flow in porous media.

**Date: 23 February 2016 (Tuesday)
Time: 4:30 – 5:30pm
Venue: Room B5-208
Blue Zone, Level 5, Academic 1 (AC1)
City University of Hong Kong**

(Tea, coffee and mini cut cakes will be provided outside the venue before the colloquium from 4:00 to 4:30pm. Please come and join us.)

**** All interested are welcome ****

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