

Jean-Christophe Nave

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will speak on

Some Challenges in Multi-Phase Flow Modelling

ABSTRACT: The focus of this talk is the numerical solution of the two-phase incompressible Navier-Stokes equations. These equations have discontinuous coefficients and their solutions exhibit jumps in the pressure field and in gradients of the velocity field. Traditional methods aim at smearing discontinuities. However, when considering numerical approximations on a grid of finite resolution, the smearing approach leads to inaccurate solutions. I will give an overview of the problems, and some solutions, to tackle these problems systematically.

MONDAY, 19 OCTOBER 2009

LECTURE AT 4:00 PM

COFFEE, TEA, AND REFRESHMENTS FROM 3-5 PM

ROOM 617, WACHMAN BUILDING

DEPARTMENT OF MATHEMATICS