

# UBC/UMC

the undergraduate mathematics colloquium

bennett ▪ homsy ▪ peirce ▪ johnson-leung ▪ hamieh ▪ duncan

**Bud Homsy:** *Fluid motion and the Navier-Stokes Equations:*

*Why is  $F=ma$  so tough for fluids*

*and why haven't we solved these equations yet?*

*The differential equations governing the flow of fluids like air and water have been known since the 1800's. Yet they have proven to be nearly impenetrable to mathematical analysis and to solutions using supercomputers. This talk will show many examples (in the form of movies) of physical flows from science, technology and everyday life that one would like to be able to describe. I will then give the highlights of how the Navier-Stokes equations are derived and what makes them so tough to solve.*

UBC/UMC is on **wednesday**, february 3  
**3:00** to 4:00 in **MATH 105** (note the new location)

drinks and snacks will be provided

for more information check out [www.math.ubc.ca/~fsl](http://www.math.ubc.ca/~fsl), and follow the link at the bottom