

## Workshop at a glance

### Tuesday July 23<sup>rd</sup> July, 2013

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6: 00PM Registration & welcoming reception/buffet: **Mahony & Sons**, 5990 University Blvd. An informal welcome: food/beverages will be served all evening. Come and relax when you have settled in.

### Wednesday July 24<sup>th</sup> July, 2013

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8:30 AM Registration & opening

9:00 AM **Jacques Magnaudet** (IMFT, France), The hard life of air bubbles crossing a fluid/fluid interface

9:25 AM **Sarah Hormozi** (UBC), Frozen-in patterns in yield stress fluids

9:50 AM **Amy Shen** (Univ. Washington), Microstructure and Rheology of a Flow-Induced Structured Phase in Wormlike Micellar Solutions

10:15 AM **Hossein Hejazi** (Univ. Calgary), Chemically Driven Hydrodynamic Instabilities in Porous Media

10:40 AM Coffee/tea Break (Math 125/126)

11:10 AM **Kenny Breuer** (Brown), Swimming in Silly Putty

11:35 AM **Paul Grassia** (Manchester), Three Films Good, Four Films Bad! (A Introduction to Foam Rheology)

12:00 AM **Roberto Zenit** (UNAM, Mexico), Locomotion of microorganisms in complex fluids

12:25 PM **Eliot Fried** (McGill), A dissipative particle dynamics model for suspensions of self-propelled bacteria

12:50 PM Lunch (Math 125/126)

2:00 PM **Satish Kumar** (Univ. Minnesota), Dynamic Wetting Failure and Air Entrainment: What can Thin-Film Models Teach Us?

2:25 PM **Gwynn Elfring** (UBC), Interfacial dilatational rheology

2:50 PM **Shelley Anna** (Carnegie Mellon), Probing Dilational Interfacial Stresses of Complex Interfaces Using a Microscale Spherical Bubble

3:15 PM **Jalel Azaiez** (Univ. Calgary), Viscous Fingering Instability for Time-Dependent Injection Velocities

3:40 PM Coffee/tea Break (Math 125/126)

4:00 PM **Bamin Khomami** (Univ. Tennessee), Polymer Induced Breakdown of Large-Scale Taylor Vortex Structures and the Resulting Drag Enhancement in Turbulent Taylor-Couette Flows: Direct Numerical Simulations and Mechanistic Insight

4:25 PM **Eckart Meiburg** (UCSB), Gravity-driven Interfacial Flows: Vorticity-based Models

4:50 PM **Eric Shaqfeh** (Stanford), Vesicles and Vesicle Suspensions in Flow

6:30 PM **Dinner cruise from Granville Island**. We will sail on the M.V. Carousel II, (Accent Cruises Ltd, #100-1676 Duranleau St. Vancouver), sailing around the Vancouver shoreline from 7.00-10.00 PM. Boarding from 6.00 PM at the dock (see map and directions). Take bus from UBC and board the boat before departure!

### Thursday July 25<sup>th</sup> July, 2013

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9:00 AM **François Charru** (IMFT, France), Sand ripples and dunes

9:25 AM **Morris Flynn** (Univ. Alberta), Buckling of a thin, viscous film in an axisymmetric geometry

9:50 AM **Anthony Wachs** (IFP, Lyon, France), The use of Zick & Homsy's analytical solution in the DNS of particulate flows

10:15 AM **Paul Steen** (Cornell), Vibrating Sessile Rayleigh Drops

10.40 AM	Coffee/tea Break (Math 125/126)
11.10 AM	<b>Joe Goddard</b> (UCSD), Dissipation Potentials for the Rheology of Particulate Media
11.35 AM	<b>Kamran Alba</b> (UBC), Miscible density-unstable displacement flows in inclined tube
12.00 AM	<b>Thomas Ward</b> (Iowa State), Pulsatile gas injection in a radial Hele-Shaw cell
12.25 PM	Lunch (Math 125/126)
2.10 PM	<b>Neil Balmforth</b> (UBC), Some Contact Line Problems
2.35 PM	<b>Rouslan Krechetnikov</b> (UCSB), Chemically-driven interfacial singularities
3.00 PM	<b>Hadi Mohammadigoushki</b> (UBC), Size segregation in sheared two-dimensional foams.
3.25 PM	<b>Juan Gomba</b> (UNCP, Buenos Aires, Argentina), Closed-analytical solutions for the shape of two dimensional droplets under partially-wetting conditions.
3.50 PM	Coffee/tea Break (Math 125/126)
4.20 PM	Special Session Highlighting the Research Contributions of G. M. Homsy <ul style="list-style-type: none"> <li>☺ <b>Paul Grassia</b> (Manchester): Thermal convection</li> <li>☺ <b>Serafim Kalliadasis</b> (Imperial College): Thin film flows</li> <li>☺ <b>Eckart Meiburg</b> (UCSB): Porous media flows</li> <li>☺ <b>Eric Shaqfeh</b> (Stanford): Complex fluids</li> <li>☺ <b>Thomas Ward</b> (Iowa State) Drops and bubbles</li> </ul>
6.30 PM	Cocktails followed by Banquet Dinner in honour of G.M. Homsy at <b>Cecil Green Park House</b>

## Friday July 26<sup>th</sup> July, 2013

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9:00 AM	<b>Hadi Mehrabian</b> (UBC), Capillary-inertial jet production and disintegration
9.25 AM	<b>Parviz Moin</b> (Stanford), On the congruity of transitional and fully developed turbulent boundary layers
9.50 AM	<b>Harish Dixit</b> (UBC), The elastocapillary Landau-Levich problem
10.15 AM	<b>Xiu Mei Xu</b> (IMEC, Belgium), Wetting transitions on patterned substrates
10.40 AM	Coffee/tea Break (Math 125/126)
11.10 AM	<b>Serafim Kalliadasis</b> (Imperial College), The contact line problem and related menaces
11.35 AM	<b>Pirouz Kavehpour</b> (UCLA), Spreading and Arrest of Molten Liquid on a Cold Solid Substrate
12.00 PM	<b>Ian Frigaard</b> (UBC) A weighted residual method for multilayer non-Newtonian fluid flows
12.25 PM	Close

To view the full schedule please go to: <http://www.pims.math.ca/files/COFFIN2Program-Final1.pdf>

**Event Evaluation Survey:** Please help PIMS to improve the quality of its events and plan for the future by filling out the survey located at: <https://docs.google.com/spreadsheets/viewform?formkey=dG9fd2JMRk1JQk1JHgwOWRtQINmWmc6MA#gid=0>