« Formation and structure of singularities »

Paris, March Monday 17th – Friday 21st, 2008

The spring school will take place at the
Amphitheater Darboux
Henri Poincaré Institute, 11 rue Pierre et Marie Curie, Paris 75005
Two long lectures and an informal session are scheduled for the first week, while four lectures (shown in blue) and shorter presentations for the second week.

Program

Monday March 17th, 2008

10.00am – 10.30am	Welcome Coffee
10.30am – 12.00pm	**Keith Moffatt** (Cambridge) : «Magnetic Relaxation and the formation of current sheet singularities».
12.00pm – 12.30pm	**Yoshifumi Kimura** (Univ. Nagoya) : «Self-similar collapse of 3D vortex filament model».
12.30pm – 2.00pm	Lunch
2.00pm – 2.45pm	**Michael Moseler** (Freiburg) : «The atomistic view of capillary singularities : nanoscale necks and wedges».
2.45pm – 3.30pm	**Lucas Biferale** (Roma) : «Wetting failure and contact line dynamics in a Couette flow».
3.30pm – 4.00pm	Coffee Break
4.00pm – 5.00pm	**Günther Grün** (University Erlangen) : «Thin film flow influenced by thermal fluctuations».

Tuesday March 18th, 2008

9.00am – 10.30am	**Keith Moffatt** (Cambridge) : «Magnetic Relaxation and the formation of current sheet singularities».
10.30am – 11.00am	Coffee Break
11.00am – 12.30pm	**Michael Brenner** (Harvard) : «Some singularities of current interest».
12.30pm – 2.00pm	Lunch
2.00pm – 2.45pm	**Benoît Roman** (ESPCI, Paris) : «The frustrating tearing of adhesive tape».
2.45pm – 3.30pm	**Michael Marder** (Austin) : «Mysteries of popping balloons».
3.30pm – 4.00pm	Coffee Break

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11 rue Pierre et Marie Curie, 75005 Paris – France
Telephones : 01 44 27 67 75 /67 64 – Fax : 01 44 07 09 37

4.00pm – 5.00pm **Yves Pomeau** (Paris) : «Moving contact line in theory and experiments».

Wednesday March 19th, 2008

9.00am – 10.30am **Franck Merle** (Cergy-Pontoise) : «Description of blow-up behavior for the critical NLS in space dimension N < 6».

10.30am – 11.00am Coffee Break

11.00am – 12.30pm **Michael Brenner** (Harvard) : «Mathematical challenges of self assembly».

12.30pm – 2.45pm **Workshop Banquet**

2.45pm – 3.30pm **Elie Raphaël** (ESPCI) : «Swimming in circles».

3.30pm – 4.00pm Coffee Break (At the ground floor)

4.00pm – 5.00pm **Len Pismen** (Haïfa) : «Resolving the contact line singularity».

Thurday March 20th, 2008

9.00am – 9.45am **Daniel Bonn** (LPS-ENS, Paris) : « Evaporating droplets, dewetting and pattern formation».

9.45am – 10.30am **Stephen Garoff** (Carnegie Mellon) : «Looking for the Inner Scale Physics Near a Moving Contact Line».

10.30am – 10.30am Coffee Break

11.00am – 12.30pm **Franck Merle** (Cergy-Pontoise) : «Description of blow-up behavior for the critical NLS in space dimension N < 6».

12.30pm – 2.00pm Lunch

2.00pm – 2.45pm **Sergio Rica** (LPS-ENS) : «Wave condensation».

2.45pm – 3.30pm **Jens Hoppe** (Stockholm) :
«The problem of singularity formation in relastivistic membrane theories».

3.30pm – 4.00pm Coffee Break

4.00pm – 5.00pm **Len Pismen** (Hafa) : «Resolving the contact line singularity».

Friday March 21st, 2008

9.00am – 9.45am **John Lowengrub** (Irvine) :«Controlling the morphology of viscous fingering patterns : A surprising discovery».

9.45am – 10.30am **Stephen Garoff** (Carnegie Mellon) : «Hydrodynamics Near Moving Contact Lines : Can the Fluid Ever Be Newtonian?».

10.30am – 11.00am Coffee Break

11.00am – 12.00pm **Russel Caflisch** (UCLA) : «Complex Singularities for the 3D Euler Equations».

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