

Second SCAT European Workshop
September 25-29 2006

“Mathematical Modelling and Challenges in Computational Science”

Host Institutions : { Laboratoire de Modélisation en Mécanique (LMM) www.lmm.jussieu.fr
Laboratoire de Physique et Mécanique des Milieux Hétérogènes
www.espci.fr

Programme of Activities

Monday September 25th		Topic	Biomechanics	
		Location	LMM, Tour 55-65, 5 th ét., place Jussieu, Salle 501	
9h30-10h30	Welcome: Lorena Barba & Clotilde Nicolle (I.R. of UPMC)	SCAT & Int'l Relation department of UPMC		
10h30-11h	Coffee Break			
11h-12h	Lorena Barba	U. of Bristol	Open questions on SCAT	
12h-12h30	N. Dispot, J.M.Fullana, P.Flaud and M.Rossi	MSC, Innothera, LMM	Atraumatic Inverse Methods in Haemodynamics	
12h30-14h	Lunch			
14h-15h	Georges Debrégeas	LPS/ENS	A biomimetic approach to tactile perception	
15h-15h30	Ramiro Godoy-Diana, Jean-Luc Aider & José-Eduardo Wesfreid	PMMH	Experiments on the vortex streets produced by a flapping foil	
15h30-16h	Coffee Break			
16h-16h30	Pierre-Yves Lagrée	LMM	Boundary layer methods in Biomechanics	

Tuesday September 26th		Topic	Surface flows	
		Location	LMM, Tour 55-65, 5 th floor place Jussieu, Salle 501	
9h-10h	Stéphane Popinet	NIWA, Wellington	TBA	
10h-10h30	Coffee Break			
10h30-11h	Andre Nachbin	IMPA, Brazil	New Reduced Models for Wave Propagation over Turbulent Surfaces	
11h-11h30	S. Afkhami	Toronto	TBA	
11h30-12h	Laurent Duchemin	IRPHE	Boundary integral methods applied to some singular flows	
12h-14h00	Lunch			
14h-14h30	Harunori Nakagawa-Yoshikawa & Eduardo Wesfreid	PMMH ESPCI	An interfacial instability under oscillatory shear	
14h30-15h	Ismael Herrera	UNAM, Mexico	Consistent modelling of variable bubble-point reservoirs in Petroleum Engineering	
15h-15h30	Coffee Break			
15h30-17h	Team meetings	SCAT	Scholarships, Dissemination	

Wednesday September 26th

Day off

Thursday September 28th		Topic	Turbulence	
		Location	ESPCI, Amphithéâtre Langevin, bat N 2eme étage	
9h30-10h	Susana Gomez	UNAM, Mexico	On solving parameter estimation of simulation based optimization problems	
10h-10h30	Jorge Zubelli	IMPA, Brazil	Inverse problems and high performance computing	
10h30-11h	Ivan Delbende, Maurice Rossi	LIMSI-Orsay LMM	Interaction between antiparallel vortices with or without swirl	
11h-11h30	Coffee Break			
11h30-12h00		PMMH	TBA	
12h30-14h00	Lunch			
14h-15h00	Olivier Cadot	ENSTA, Paris	Turbulent drag control of bluff bodies in fully separated regime	
15h-15h30	David Emerson	Daresbury Lab, UK	TBA	
15h30-16h	Coffee Break			
16h-16h30	Stéphane Le Dizés	IRPHE, Marseille	Instability and Aircraft Vortices.	
16h30-17h	T. Duriez, J.-L. Aider and J.E. Wesfreid	PMMH	Mean flow modification by streamwise vortices induced by vortex generators. Application to separated flows.	

19h00	SCAT Dinner	Restaurant 'Le temps des cerises', 18-20 rue de la Butte-aux-Cailles, Paris XIII (01 4589 6948)		
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Friday September 29th		Topic	Granular flows	
		Location	ESPCI, Amphithéâtre Langevin, bat N 2eme étage	
9h-10h	Pascal Viot	LPTL, Paris	Event-driven Molecular Dynamics of granular gases	
10h-10h30	Pierre-Yves Lagrée & Lydie Staron	LMM DAMTP	Stability of erodible beds- and collapse of a column of grains	
10h30-11h	Coffee Break			
11h-12h00	General Seminar of PMMH: Ernesto Altshuler	Universidad de La Havana	"Strange phenomena in Cuban sands"	
12h30-14h	Lunch			
14h-15h	Wrap up session	SCAT		
Close of meeting				