

PIRE and OxMOS workshop on
**Pattern formation and multiscale Phenomena in
materials**

Oxford, September 26-28, 2011

Timetable (Overview)

Monday		Tuesday		Wednesday	
9.30-9.50	Registration	9-10.30	<i>OxMOS II</i>	9-10.30	<i>OxMOS III</i>
		9-9.30	Sengul	9-10	Preziosi (1h)
9.50-10.00	Opening	9.30-10	Koumatos		
10-11	Imbert (1h)	10-10.30	Mora-Corral	10-10.30	Hosoi
11-11.30	coffee	10.30-11	coffee	10.30-11	coffee
11.30-12.00	Lewicka	11-12.30	Eckl	11-12.30	Lu
12.00-12.30	Bella	11.30-12.00	James	11.30-12.00	Espanol
		12.00-12.30	Mora	12.-12.30	van Koten
	Lunch		Lunch		Lunch
2-3.30	<i>OxMOS I</i>	2.00-2.30	Steiner	2.00-2.30	Kinderlehrer
2-3	Curtin (1h)	2.30-3.00	Simpson	2.30 - 3.00	Elsley
3- 3.30	Henao	3-3.30	coffee	3-3.30	coffee
3.30-4	coffee	3.30-5.00	Round table	3.30-4.30	Voorhees (1h)
4-4.30	Slepcev		(International		
4.30-5	Poster Intr.		Experience)		
5	Reception	5.00-6.00	Steering comm.		
	(with Posters)	6.00-7.00	Executive comm.		
7.30			Conference		
			dinner		

Please turn over for a detailed program

Monday, September 26

- 9.30-9.50 Registration
9.50-10.00 Opening Remarks (Ball for OXMOS, Kohn for PIRE)
- 10.00-11.00 Cyril Imbert
Spirals moving by forced mean curvature motion
- 11.00-11.30 Coffee break
- 11.30-12.00 Marta Lewicka
Matching of isometries and asymptotic theories of elastic thin films
- 12.00-12.30 Peter Bella
Wrinkles as a relaxation of compressive stresses in annular thin films
- 12.30-2.00 Lunch break
- 2.00-3.30 OXMOS session I (fracture)
- 2.00-3.00 Bill Curtin
Challenges in modeling fracture in metals
- 3.00-3.30 Duvan Henao
Isoperimetric inequalities and cavity interactions in nonlinear elasticity
- 3.30-4.00 Coffee break
- 4.00-4.30 Dejan Slepcev
Crossover in the coarsening rates in demixing of binary viscous fluids
- 4.30-5.00 Introduction of Posters
- 5.00– Reception (with Posters)

Tuesday, September 27

- 9.00-10.30 OXMOS session II (microstructure)
- 9.00-9.30 Yasmin Sengul
Quasistatic nonlinear viscoelasticity and gradient flows
- 9.30-10.00 Kostas Koumatos
Quasiconvexity at edges and corners and the nucleation of austenite in martensite via localized heating
- 10.00-10.30 Carlos Mora-Corral
Quasistatic evolution of cavities in nonlinear elasticity
- 10.30-11.00 Coffee break
- 11.00-11.30 Thomas Eckl
Multiscale material modelling for Li-Ion batteries
- 11.30-12.00 Richard James
Compatibility, hysteresis and the direct conversion of heat to electricity
- 12.00-12.30 Maria Giovanna Mora
Quasistatic evolution in non-associative plasticity
- 12.30-2.00 Lunch break
- 2.00-2.30 Jutta Steiner
The formation and coarsening of the concertina pattern
- 2.30-3.00 Gideon Simpson
Materials with large deformation and evolving microstructure
- 3.00-3.30 Coffee break
- 3.30-5.00 Round Table on International Experience
- 5.00-6.00 Steering Committee meeting
- 6.00-7.00 Executive committee
- 7.30 Conference Dinner

Wednesday, September 28

- 9.00-10.30 OXMOS session III
- 9.00-10.00 Luigo Preziosi
Cell adhesion and re-organisation in tumor growth models
- 10.00-10.30 Annette Hosoi
Low temperature solvent annealing of organic thin films
- 10.30-11.00 Coffee break
- 11.00-11.30 Jianfeng Lu
Stability and macroscopic limit of electronic structure models
- 11.30-12.00 Malena Espanol
A Γ -convergence analysis of the quasicontinuum method
- 12.00-12.30 Brian van Koten
Energy-based blended quasicontinuum approximations
- 12.30-2.00 Lunch break
- 2.00-2.30 David Kinderlehrer
A view of entropy and critical events in microstructural coarsening
- 2.30-3.00 Matt Elsey
Extension of distance-function-based diffusion-generated motion to anisotropic grain growth
- 3.00-3.30 Coffee break
- 3.30-4.30 Peter Voorhees
Pattern formation and atomic scale processes in crystals