

MATERIALS AND COMPLEXITY IV --- ANU KIOLOA CAMPUS 14-17 NOVEMBER 2006

Tuesday Nov 14

1000 Coach departs RSPHysSE
1300 Arrive Kioloa
Lunch
Move in to rooms/ unpack

1430-1700 **Nanotechnology I**

Chair: Vince Craig

Christoph Arns Welcome

Paul T. Callaghan *NMR methodologies for the study of molecular dynamics*

Drew Parsons The relevance of nonlocal electrostatics to intermolecular forces

Kathryn E. Washburn The influence of wettability on pore-pore exchange NMR

Shannon Notley Surface interactions with biomacromolecular surfaces derived from wood

Mika Kohonen Wetting and capillarity in biological systems

1900 Seafood and BBQ dinner

Wednesday Nov 15

0800-0900 Breakfast
Discussion time

1000-1230 **Complex Systems I**

Chair: Stephen Hyde

Klaus R. Mecke *Morphological descriptors of porous media*

Toen Castle On the wrangling of crystal structures: an ignorant perspective

Rosemary White Plant morphology, movies and models

Vanessa Robins Topological signatures of sphere packs and random point processes

Anthony Jones Biomaterials, micro-CT and why we can't yet grow a complete phallus in a test tube

1300-1400 Lunch
Discussion time

1500-1730 **Advanced Materials I**

Chair: Mark A. Knackstedt

Boris Gurevich *Mesoscopic flow effects in poroelasticity*

Oliver Gaede Stress sensitivity of rock properties

Julianna Toms Attenuation and dispersion of elastic waves in partially saturated rocks

Chiara Testa The Fabric of Bone: A study on trabecular mechanics and microarchitecture

Andy Wilkins Fracture resistance using topological optimization

1900 Pasta dinner
2030 Rob Sok hosts ...

Thursday Nov 16

0800-0900 Breakfast
Discussion time

1000-1230 **Nanotechnology II**

Chair: Ray Roberts

Chiara Neto *Boundary slip in Newtonian Liquids*

Liliana De Campo Highs and lows of an organic chemist:
Cubosomes, hexosomes and emulsified microemulsions

Andrew Fogden Ink-paper interactions

Drew Evans Quantitative measurement of Photon Pressure using fN resolution AFM

Jacob Hansen Small-angle scattering and simulations of thylakoid structural dynamics

1300-1400 Lunch
Discussion time

1500-1730 **Complex Systems II**

Chair: Tiziana Di Matteo

Jean-Marc Di Meglio *Non-Euclidean Foams*

David Salt *Resilience and complex adaptive systems*

Corrado Di Guilmi Introducing degradation analysis for profitability of firms

Fabio Clementi Scaling distributions in economics: the size distribution of incomes

Tim Senden *One Fish, Two Fish, Red Fish, New Fish*

1815 Bus departs Kioloa for
1900 Conference Dinner
2300 Bus departs Mollymook

Friday Nov 17

0800-0900 Breakfast
Discussion time

1000-1230 **Advanced Materials II**

Chair: Tomaso Aste

Mahyar Madadi Fabric tensors in polydisperse granular media

Garry Delaney Computational studies of granular packings

Ji-Youn Arns Permeability upscaling: lattice Boltzmann, networks, and renormalisation

Abid Ghous Microporous endeavours

Christoph Arns Computational NMR

Christoph Arns Closing remarks

1300-1400 Lunch
Pack up.

1500 Coach departs Kioloa

1800 Coach arrives RSPHysSE

SCHEDULE OUTLINE - Materials and Complexity IV - Kioloa 2006.

Monday Nov 13

Advance party to Kioloa
AV set up and food shopping

Tuesday Nov 14

1000 Coach departs RSPHysSE
1300 Arrive Kioloa
Lunch
Move in to rooms/ unpack
1430-1700 *Session 1*
1900 BBQ Dinner

Wednesday Nov 15

0800-0900 Breakfast
Discussion time
1000-1230 *Session 2*
1300-1400 Lunch
Discussion time
1500-1730 *Session 3*
Free time
1900 Pasta dinner
2030 Rob Sok hosts ...

Thursday Nov 16

0800-0900 Breakfast
Discussion time
1000-1230 *Session 4*
1300-1400 Lunch
Discussion time
1500-1730 *Session 5*
1815 Bus departs Kioloa for
1900 Conference Dinner
2300 Bus departs Mollymook

Friday Nov 17

0800-0900 Breakfast
Discussion time
1000-1230 *Session 6*
1300-1400 Lunch
Pack up.
1500 Coach departs Kioloa
1800 Coach arrives RSPHysSE

Saturday Nov 18

Final clean up and departure.