Wed 30 Jan 2013

11:00 - 13:00 FiNZ registration and welcome buffet lunch

Where:

Department of Mathematics and Statistics, University of Canterbury, Erskine Building, Science Rd,

llam, Christchurch 8041 Calendar: FiNZ 2013

Created by: dr.phil.wilson@gmail.com

Description:

Room 447 Erskine Please come along to register, collect your conference pack, and share complimentary buffet lunch.

13:00 - 13:30 FiNZ opening session

Where:

Department of Mathematics and Statistics, University of Canterbury, Erskine Building, Science Rd,

llam, Christchurch 8041 Calendar: FiNZ 2013

Created by: dr.phil.wilson@gmail.com

Description:

Room 031 Erskine An informal opening to the conference, including a welcome from Prof Jennifer Brown, Head of Deaprtment (Mathematics & Statistics, Canterbury). We might open the opening at around 1315.

13:30 - 14:00

Observations of stratified turbulence in the ocean, Dr Craig Stevens (NIWA/Auckland)

Where:

Department of Mathematics and Statistics, University of Canterbury, Erskine Building, Science Rd,

llam, Christchurch 8041 Calendar: FiNZ 2013

Created by: dr.phil.wilson@gmail.com Description: Room 031 Erskine Abstract

14:00 - 14:30

Numerical techniques for large-scale cerebral vasculature simulation, Dr Richard Brown (Canterbury)

Where:

Department of Mathematics and Statistics, University of Canterbury, Erskine Building, Science Rd,

Ilam, Christchurch 8041 Calendar: FiNZ 2013

Created by: dr.phil.wilson@gmail.com Description: Room 031 Erskine Abstract

14:30 - 15:30

Plenary 1a: Complex behaviour of structured fluids: a multi-scale story, Part I, Dr Teo Burghelea (Nantes)

Where

Department of Mathematics and Statistics, University of Canterbury, Erskine Building, Science Rd,

llam, Christchurch 8041 Calendar: FiNZ 2013

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15:30 - 16:00 Tea

Where:

Department of Mathematics and Statistics, University of Canterbury, Erskine Building, Science Rd,

Ilam, Christchurch 8041 **Calendar:** FiNZ 2013

Created by: dr.phil.wilson@gmail.com Description: Room 447 Erskine

16:00 - 17:00

Plenary 1b: Complex behaviour of structured fluids: a multi-scale story, Part II, Dr Teo Burghelea (Nantes)

Where:

Department of Mathematics and Statistics, University of Canterbury, Erskine Building, Science Rd, Ilam, Christchurch 8041

Calendar: FiNZ 2013

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Dynamics of power-law fluid on horizontal substrates, Mr Gulraiz Ahmed (Canterbury)

Department of Mathematics and Statistics, University of Canterbury, Erskine Building, Science Rd,

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17:30 - 18:00 Fluid flow in falling film evaporators, A/Prof Ken Morison (Canterbury)

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18:00 - 21:00 **Evening reception**

Where:

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Ilam. Christchurch 8041 Calendar: FiNZ 2013

Created by: dr.phil.wilson@gmail.com

Description:

Room 447 Erskine Please join us for complimentary food and drink, and socialise with your

fellow fluids people.

Thu 31 Jan 2013

08:30 - 09:00

Droplet microfluidics for lab-on-chip device applications, Ms Becky Soffe (Canterbury)

Where:

Department of Mathematics and Statistics, University of Canterbury, Erskine Building, Science Rd, llam, Christchurch 8041

Calendar: FiNZ 2013

Created by: dr.phil.wilson@gmail.com Description: Room 031 Erskine Abstract

09:00 - 09:30 Oxygen measurement in droplets, Mr Johannes Erhardt (Canterbury)

Where:

Department of Mathematics and Statistics, University of Canterbury, Erskine Building, Science Rd, Ilam, Christchurch 8041

Calendar: FiNZ 2013

09:30 - 10:30

Plenary 2a: Honey I shrunk the lab: microfluidics for lab-on-a-chip devices, Prof Leslie Yeo (RMIT)

Where:

Department of Mathematics and Statistics, University of Canterbury, Erskine Building, Science Rd,

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Created by: dr.phil.wilson@gmail.com Description: Room 031 Erskine Abstract

10:30 - 11:00 Tea

Where:

Department of Mathematics and Statistics, University of Canterbury, Erskine Building, Science Rd,

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Created by: dr.phil.wilson@gmail.com

Description: Room 447 Erskine Complimentary morning tea

11:00 - 12:00

Plenary 2b: Surface acoustic wave microfluidics: novel phenomena and applications for biotechnology, Prof Leslie Yeo (RMIT)

Where:

Department of Mathematics and Statistics, University of Canterbury, Erskine Building, Science Rd,

Ilam, Christchurch 8041 Calendar: FiNZ 2013

Created by: dr.phil.wilson@gmail.com Description: Room 031 Erskine Abstract

12:00 - 12:30 Self-propelling droplets, Mr Yannick Muller (Canterbury)

Where:

Department of Mathematics and Statistics, University of Canterbury, Erskine Building, Science Rd,

Ilam, Christchurch 8041 **Calendar:** FiNZ 2013

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12:30 - 13:00

Very long-range hydrodynamic effects within two-dimensional microorganisms suspensions, Dr Richard Clarke (Auckland)

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Created by: dr.phil.wilson@gmail.com Description: Room 031 Erskine Abstract

13:00 - 14:00 Lunch, group photo, and laminar jet demonstration (Ken Morison)

Where:

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Created by: dr.phil.wilson@gmail.com

Description:

Lunch is not provided today; please explore lunch options on and around campus as advised by the organising committee. A/Prof Ken Morison (Canterbury) will set up his laminar jet demonstration on the lawns outside the Erskine building. We will try to take a group photo at the laminar jets.

14:00 - 14:30 Putting the 'Fluidics' in 'Nanofluidics'. Dr Geoff Willmott (IRL)

Where:

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Ilam, Christchurch 8041 Calendar: FiNZ 2013

14:30 - 15:30

Plenary 3a: Singularities in fluid mechanics, from boundary-layer separation to finite-time breakdown (and beyond), Part I, Prof Jim Denier (Auckland)

Where:

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15:30 - 16:00 Tea

Where:

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Created by: dr.phil.wilson@gmail.com

Description: Room 447 Erskine Please join us for complimentary afternoon tea.

16:00 - 17:00

Plenary 3b: Singularities in fluid mechanics, from boundary-layer separation to finite-time breakdown (and beyond), Part II, Prof Jim Denier (Auckland)

Where

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Created by: dr.phil.wilson@gmail.com Description: Room 031 Erskine Abstract

17:00 - 17:30

A data driven turbulence model: a future alternative to CFD in complex situations, Dr Rob Connell (Lincoln Agritech)

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Created by: dr.phil.wilson@gmail.com Description: Room 031 Erskine Abstract

17:30 - 18:00

Turbulence spectra in the atmospheric surface layer - new scaling concepts, Dr Johannes Laubach (Landcare Research) with Prof Keith MacNaughton (Edinburgh)

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Fri 1 Feb 2013

08:30 - 09:00

Modelling silica scale deposition in geothermal systems, Mr Pavlo Kokhanenko (Canterbury)

Where

Department of Mathematics and Statistics, University of Canterbury, Erskine Building, Science Rd,

Ilam, Christchurch 8041 Calendar: FiNZ 2013

09:00 - 09:30 Deep hydrology of the Taupo volcanic zone, Dr Warwick Kissling (IRL)

Where:

Department of Mathematics and Statistics, University of Canterbury, Erskine Building, Science Rd,

Ilam, Christchurch 8041 **Calendar:** FiNZ 2013

Created by: dr.phil.wilson@gmail.com Description: Room 031 Erskine Abstract

09:30 - 10:30

Plenary 4a: Adaptive numerical methods for fluid mechanics, Dr Stephane Popinet (NIWA)

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Created by: dr.phil.wilson@gmail.com Description: Room 031 Erskine Abstract

10:30 - 11:00 Tea

Where:

Department of Mathematics and Statistics, University of Canterbury, Erskine Building, Science Rd,

Ilam, Christchurch 8041 Calendar: FiNZ 2013

Created by: dr.phil.wilson@gmail.com

Description: Room 447 Erskine Complimentary morning tea

11:00 - 12:00

Plenary 4b: Applications to multiscale problems from microfluidics to geophysical fluid dynamics, Dr Stephane Popinet (NIWA)

Where:

Department of Mathematics and Statistics, University of Canterbury, Erskine Building, Science Rd,

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12:00 - 12:30 Wind farm simulations using LES, Dr John Cater (Auckland)

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Description: Room 031 Erskine Abstract

12:30 - 13:00 Water surface topography based on translucency, Dr Scott Post (Bradley)

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Created by: dr.phil.wilson@gmail.com Description: Room 031 Erskine Abstract

13:00 - 13:30

Modelling of landslide-generated tsunamis, Mr Colin Whittaker (Canterbury)

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FiNZ 2013

13:30 - 14:00 Closing

Where:

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Calendar: FiNZ 2013

Created by: dr.phil.wilson@gmail.com

Description: Room 031 Erskine Brief words from the organising committee to close the conference.