PROGRAM OVERVIEW

Day 1, Monday 16 December 2013	
08:30 – 09:15	Coffee and Registration
09:15 – 09:30	Opening & Welcome
09:30 – 10:30	Invited talk 1
10:30 – 10:50	Morning tea
10:50 – 12:30	Session 1 (4 presentations)
12:30 – 13:30	Lunch
13:30 – 14:30	Invited talk 2
14:30 – 15:20	Session 2 (2 presentations)
15:20 – 15:40	Afternoon tea
15:40 – 16:55	Session 3 (3 presentations)
16:55 – 17:25	Open discussion – Experimental matters
17:25 – 18:50	Free time (lab tours upon request)
19:00 – 22:00	Dinner
Day 2, Tuesday 17 December 2013	
08:30 – 09:30	Coffee
09:30 – 10:30	Invited talk 3
10:30 – 10:50	Morning tea
10:50 – 12:30	Session 4 (4 presentations)
12:30 – 13:30	Lunch
13:30 – 15:10	Session 5 (4 presentations)
15:10 – 15:30	Afternoon tea
15:30 – 16:20	Session 6 (2 presentations)
16:20 – 16:50	Open discussion – Numerical matters
16:50 – 17:50	Closing & Socialising

DETAILED SCHEDULE

16 DECEMBER 2013 (MONDAY)

Morning Session	
08:30 - 09:15	Coffee and Registration
09:15 - 09:30	Opening & Welcome
09:30 - 10:30	**Invited talk 1** Chair: Steve Armfield (The University of Sydney) Experimental and numerical study of natural convection in a differentially heated channel AN-14 ***Professor Christophe Ménézo***, CETHIL, Chair INSA/EDF, INSA of Lyon, France
10:30 - 10:50	Morning tea
	Session 1 Session Chair: Gordon Mallinson (The University of Auckland)
10:50 - 11:15 AN-19	Stability of horizontal convection with different temperature profiles ***TzeKih Tsai***, Monash University, Australia
11:15 - 11:40 AN-08	Horizontal convection in a rotating cylinder ***Hussam Wisam***, Monash University, Australia
11:40 - 12:05 AN-02	Transition in inclined differentially heated cavities ***Steve Armfield***, The University of Sydney, Australia
12:05 - 12:30 AN-03	Interaction between turbulent natural convection in a channel and the surroundings ***Peter Brady***, University of Technology, Sydney, Australia
12:30 - 13:30	Lunch

16 DECEMBER 2013 (MONDAY)

Afternoon Session	
13:30 - 14:30 AN-17	**Invited talk 2** Chair: John Reizes (University of Technology, Sydney) The modelling of flow and convection of a Bingham Fluid in a porous medium ***Dr Andrew Rees***, University of Bath, UK
Session 2 Session Chair: Wenxian Lin (James Cook University)	
14:30 - 14:55 AN-16	Natural convection induced by radiation in a square cavity: experimental observation ***Ghasem Naghib***, The University of Sydney, Australia
14:55 - 15:20 AN-06	On natural convection in water bodies induced by absorption of solar radiation ***Tae Hattori***, The University of Sydney, Australia
15:20 - 15:40	Afternoon tea
Session 3 Session Chair: Christophe Ménézo (CETHIL, Chair INSA/EDF, INSA of Lyon, France)	
15:40 - 16:05 AN-20	Simultaneous visualization of concentration and flow field of CO2 absorption process at gas-liquid interface ***Shoya Usuki***, Tohoku University, Japan
16:05 - 16:30 AN-11	Numerical and experimental studies of periodical thermal plume separation above a thin fin in a differentially heated cavity ***Liu Yang***, The University of Sydney, Australia
16:30 - 16:55 AN-09	Enhancing natural convection heat transfer from a vertical surface using two horizontal adiabatic fins ***Chengwang Lei***, The University of Sydney, Australia
16:55 - 17:25	**Open discussion** Experimental matters Facilitator: John Patterson (The University of Sydney)
17:25 - 18:50	Free time (Lab tours upon request)
19:00 - 22:00	Dinner

17 DECEMBER 2013 (TUESDAY)

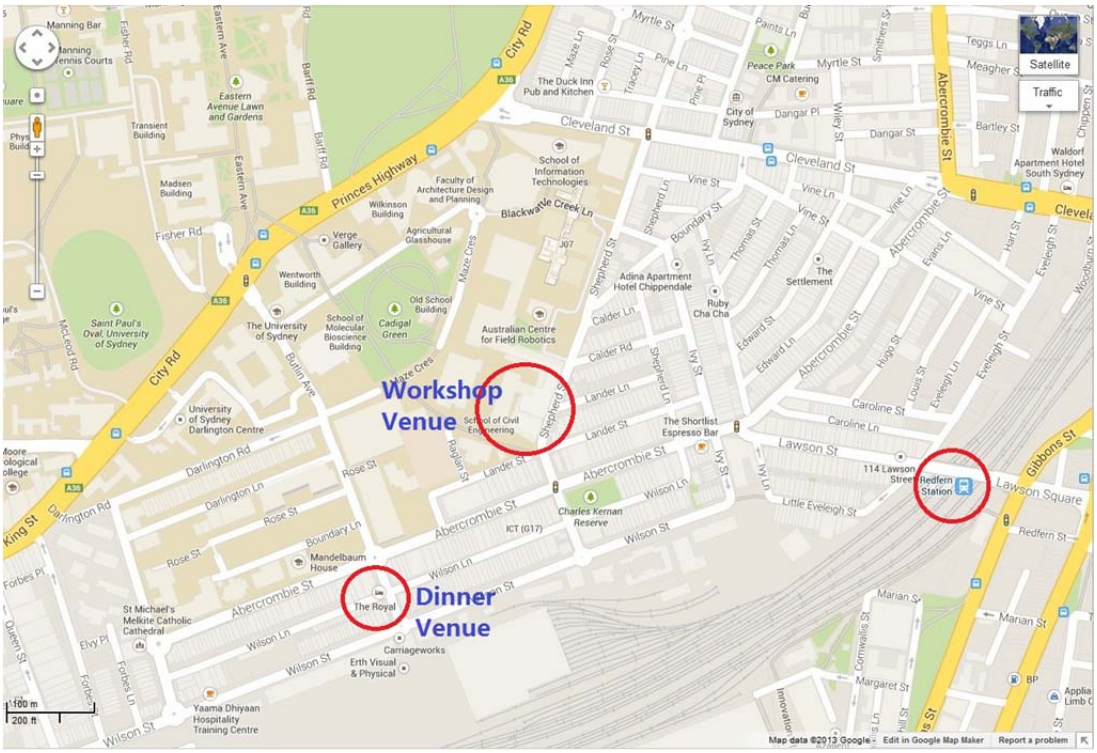
Morning Session	
08:30 - 09:30	Coffee
09:30 - 10:30	**Invited talk 3** Chair: Graham de Vahl Davis Natural convection in a box: controversies surrounding irreversible energy transfers and visualisation AN-13 ***Professor Gordon Mallinson***, The University of Auckland, New Zealand
10:30 - 10:50	Morning tea
	Session 4 Session Chair: Andrew Rees (University of Bath)
10:50 - 11:15 AN-22	Evolution of wave nonlinear interactions in a transitioning buoyant boundary-layer flow ***Yongling Zhao***, The University of Sydney, Australia
11:15 - 11:40 AN-10	Scalings for unsteady natural convection boundary layers on an evenly heated plate with time-dependent heating flux ***Wenxian Lin***, James Cook University, Australia
11:40 - 12:05 AN-04	Particle transport and mixing induced by surface heating and cooling in the near-shore region ***Shengyang Chen***, The University of Sydney, Australia
12:05 - 12:30 AN-21	Hydrodynamic stability analysis on sheared thermal convective flows ***Yuan Xiao***, James Cook University, Australia
12:30 - 13:30	Lunch

17 DECEMBER 2013 (TUESDAY)

Afternoon Session	
Session 5 Session Chair: Atsuki Komiya (Tohoku University)	
13:30 - 13:55 AN-07	Natural draft dry cooling towers: modelling and simulation ***Kamel Hooman***, The University of Queensland, Australia
13:55 - 14:20 AN-05	Effect of ceiling vents on the thermal performance of data centres ***Babak Fakhim***, The University of Sydney, Australia
14:20 - 14:45 AN-12	The natural convection in small cooling towers subjected to crosswind ***Yuanshen Lu***, The University of Queensland, Australia
14:45 - 15:10 AN-15	Natural convection boiling in Rayleigh-Benard cell and flow syphonic effect – an improved modelling approach ***Nima Nadim***, Curtin University, Australia
15:10 - 15:30	Afternoon tea
Session 6 Session Chair: Tae Hattori (The University of Sydney)	
15:30 - 15:55 AN-01	Natural convection heat transfer from a partly open enclosure ***Tim Anderson***, Auckland University of Technology, New Zealand
15:55 - 16:20 AN-18	Numerical study of natural convection in a non-uniformly heated vertical open-ended channel ***Victoria Timchenko***, The University of New South Wales, Australia
16:20 - 16:50	**Open discussion** Numerical matters Facilitator: Steve Armfield (The University of Sydney)
16:50 - 17:50	Closing & Socialising

WORKSHOP AND DINNER VENUES

The 8th ANCW will be held in Lecture Room 1 (Room 203) of the Civil Engineering Building (J05), which is located in the Engineering Precinct on the Darlington Campus of The University of Sydney. The location of the Civil Engineering Building is shown on the map below along with the venue for the Workshop dinner.



The Civil Engineering Building may also be located on the Campus Map of The University of Sydney. The building code is J05.

Participants may arrive at the Darlington Campus by car, buses, train or taxi. The nearest train station is Redfern Station, which is about 6-7 minutes' walk from the workshop venue. Paid parking and limited free parking are available around the workshop venue. The cost for a paid parking space is $4 per hour and $24 for a day. More details about parking may be provided upon request.

REGISTRATION

A registration desk will be open at 8.30-9.30am on Monday 16 October 2013 in the front foyer of the Civil Engineering Building (outside Civil Engineering Lecture Room 1). All Workshop related materials will be distributed at the registration. Delegates may also collect an access code for WiFi internet (see details below).

INTERNET ACCESS

Wireless internet access is available for university guests whilst on campus.

Connecting to the Network

To connect to the "UniSydney-Guest" network, follow the following steps:

1. Enable Wi-Fi on your device.
2. Connect to "UniSydney-Guest" wireless. No login detail is required at this stage.
3. Open your web browser*. You should now be asked for a username and password. If you are not prompted, visit:
   https://auth.wireless.sydney.edu.au/guest/guest.php.
4. Use the username and password details provided at the registration. They will expire at the end of the Workshop.

* Compatible web browsers include: Internet Explorer, Firefox, Safari. Issues may exist with Google Chrome.

PRESENTATIONS

The standard presentation is 25 minutes each including presentation, questions and changeover. The presentation should be no more than 20 minutes. To facilitate smooth running of the Workshop program, all presenters are asked to bring a soft copy of the presentations on a USB drive, which may be preloaded onto the provided laptop or desktop computer prior to each session. The presentations may also be sent by email for preloading. The operation system on the provided computers is Windows 7 with Microsoft Office 2010 installed.

ADDITIONAL INFORMATION

Tea, Coffee, Lunch & Dinner

Tea and coffee facilities will be available outside the Civil Engineering Lecture Room 1 throughout the day. Lunch will be served in the Civil Engineering Conference Room on the 4th floor of the Civil Engineering Building. The Workshop dinner will be held at The Royal Hotel, the location of which is shown on the map above. Please advise if you have any special need for catering.

Lab Tours

Tours to selected Civil and Mechanical Engineering laboratories may be arranged upon request. The best time for these tours is during the free time before the Workshop dinner on Monday 16 December 2013, although tours may also be arranged during the lunch time on both days.