

Report to AFMS on:

First AFMS Summer School held in Canberra, 9-10 December 2019

The first AFMS Summer School was held at UNSW Canberra on 9-10 December 2019, generously sponsored by the AFMS and UNSW Canberra. The Summer School was also affiliated with MODSIM 2019, a large modelling and simulation conference held the previous week in Canberra.

The organisation of the Summer School was undertaken as a joint initiative of UNSW Canberra and the newly established ACT local Chapter of the AFMS.

The Summer School included lectures, laboratory equipment demonstrations and computational tutorial classes, in the following sessions:

- Fluid-Structure Interactions, presented by A/Prof John Young and Dr Fang-Bao Tian, UNSW Canberra.
- Probabilistic Inference for Fluid Flow and Dynamical Systems, presented by A/Prof Robert Niven, UNSW Canberra.
- Fluid Experimental Methods, presented by A/Prof Sean O'Byrne, UNSW Canberra.

The Summer School also featured an invited guest lecture by Prof Chris Essex of the University of Western Ontario, London, Ontario, Canada, on “Slow Time”, which challenged some of our ideas on time averaging and time scales (see Photo 1).

The AFMS Summer School schedule is attached at the end of this document.

There were 18 registered attendees, consisting of a mix of PhD students, research associates, academics and industry professionals, from a variety of institutions nationwide. A mosaic photograph of the Summer School audience is shown in Photo 2, and a photograph of the group of attendees is shown in Photo 3.

As part of the support for the Summer School we awarded four summer scholarships, consisting of an award certificate and a cash payment of \$500, to PhD student attendees from interstate, to assist them with their travel costs. The awardees were

- Junwei Lyu, from the University of Queensland
- Olivia Ng, from UNSW Sydney
- Raoul Mazumdar, from RMIT
- Sanjiv Gunasekera, from UNSW Sydney

We wish these students all the best in their future studies.

We sincerely thank the AFMS for its support for the Summer School, which really gave us the opportunity to present a coherent research-level educational program.

Prepared by the *AFMS Summer School Co-Chairs*:

Robert Niven
Fangbao Tian

AFMS Summer School Photographs

Photo 1: Professor Chris Essex, University of Western Ontario, Canada, giving a lecture on “Slow Time”

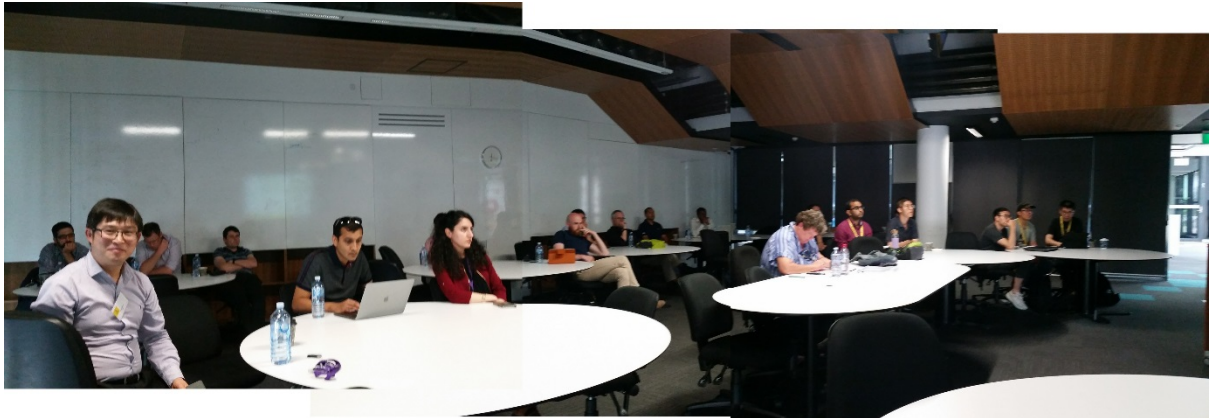
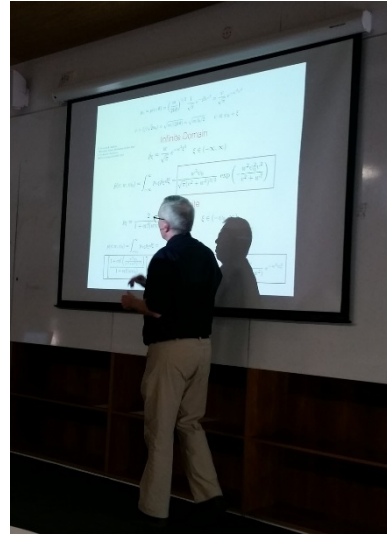


Photo 2: Mosaic of the Summer School audience



Figure 3: Attendees at the Summer School

AFMS SUMMER SCHOOL 2019: SCHEDULE

http://www.maxent.net/AFMS_SummerSchool_2019/index.html

All locations are at the UNSW Canberra (Australian Defence Force Academy) Campus, off Northcott Drive, Campbell, ACT

DAY / TIME	SEMINAR	LOCATION
Day 1: Mon 9 December		
9:00-10:00	Guest Lecture: Slow Time , by Prof. Chris Essex, University of Western Ontario, Canada	SR04, Building 32 (Lecture Theatres North), downstairs
10:00-10:30	Morning Tea (catered)	Foyer between SR04 and SR05
10:30-12:30	Lectures: Fluid-Structure Interactions , by Fangbao Tian and John Young, UNSW Canberra, Australia	SR04, Building 32 (Lecture Theatres North), downstairs
12:30-13:30	Lunch (catered)	Foyer between SR04 and SR05
13:30-15:30	Lectures: Probabilistic Inference , by Robert K. Niven, UNSW, Canberra, Australia	SR04, Building 32 (Lecture Theatres North), downstairs
15:30-16:00	Afternoon Tea (catered)	Foyer between SR04 and SR05
15:30-17:00	Tutorials: Fluid-Structure Interactions and Bayesian Inference (held concurrently), by Fangbao Tian, John Young and Robert K. Niven	Bldg 20 Rm 109 computer lab
19:00+	Summer School Dinner (sponsored)	TBA

Day 2: Tues 11 December		
9:00-11:00	Lectures: Fluid Experimental Methods, by Sean O'Byrne, UNSW Canberra, Australia	SR04, Building 32 (Lecture Theatres North), downstairs
11:00-11:30	Morning Tea (catered)	Foyer between SR04 and SR05
11:30-12:30	Demonstrations / Tour: Fluid Experimental Methods, by Sean O'Byrne, UNSW Canberra, Australia	TBA
12:30-13:30	Lunch (catered)	Foyer between SR04 and SR05
13:30-15:00	Tutorials: All Themes (held concurrently), by all presenters	Bldg 20 Rm 109 computer lab