



Research School of Physics and Engineering

Weekly newsletter | Volume 39 Number 23 | 14 – 20 June 2013

SCHOOL SEMINAR

High-precision measurement of spacetime: Detecting gravitational radiation

Dr Robert L. Ward

Department of Quantum Science, RSPE, ANU

4pm, Thursday 20 June

Leonard Huxley Lecture Theatre

Refreshments will be held in the Tea Room after the Seminar (around 5pm)

ALL WELCOME

CONGRATULATIONS

Congratulations to **Amelia Greig (PRL)**, **Sam Dixon (PRL)** and **Louise Howes (RSAA)** who are the joint winners of the Scholarship for Space Plasma, Astronomy and Astrophysics 2013!

DEPARTMENTAL SEMINARS

Nuclear Physics Department

Spectroscopy of actinide nuclei

Dr Sankha S Hota

Nuclear Physics Department

11:00am Monday 1 July

Nuclear Physics Seminar Room

FROM FACILITIES & SERVICES MANAGER

Theft at RSPE

We had a mobile phone stolen from the Oliphant building on Friday afternoon 7/6/2013. Please be aware that there may be a higher likelihood of theft at the moment and take due precaution.

PROJECT MARKET DAY

On Tuesday 13 August there will be an opportunity for staff to showcase their research and potential projects to both undergraduate students at all levels as well as graduate students. This is a great opportunity to attract potential students (3rd year project, PhD, Honours and PhD) to your research area. We expect a large participation of the undergraduate student cohort. Request for project descriptions and other information will be circulated in the coming week.

FRAME YOUR PHYSICS

Following on from last year "Frame your Physics" competition, the ACT branch of the AIP will again run the competition in 2013 to promote the communication of physics to a general audience. The idea is to make a video of up to 3 minutes presenting a topic in physics in an entertaining and informative way. There will be various prizes up for grabs including for high school students, schools and also for university students. We have been advertising the competition in our undergraduate courses and we encourage supervisors to promote the competition with their Honours and PhD students as well. Entries must be submitted by August 19. Further information can be obtained from the "Frame Your Physics" website at www.act.aip.org.au/Frame_Your_Physics or contact us: Andre Carvalho (andre.carvalho@anu.edu.au) and Cormac Corr (cormac.corr@anu.edu.au)

WELCOME

Electronics Material Engineering

Welcomes Dr Shagufta Naureen and Dr Yanan Guo.

Dr Shagufta Naureen completed her PhD at KTH University Stockholm in 2013. Her area of research is Microelectronic and Applied Physics and she has joined Professor Jagadish's group for two years working in the area of Nanowire devices. Dr Naureen is currently sitting in John Carver Bld room J4.13.

Dr Yanan Guo completed his PhD at the University of Queensland in 2013. His area of research is Material Science and Engineering and he will be working on Electro-microscopy Characterisation of Semi-conductor Nanomaterials and can be found in Cockcroft Bld room C4.64.

STAFF MOVEMENTS

Nuclear Physics Department

Professor Andrew Stuchbery will be overseas in the period 8 - 16 June. He will attend the Nuclear Chemistry Gordon Research Conference (GRC), New London, NH, USA as a former GRC Chair and Discussion Leader in a session entitled "Precision measurements of nuclear properties".

Applied Mathematics

Professor Tim Senden will be on leave for the period 17 - 22 June, **Dr Andrew Fogden** will be acting Head of Department during his absence.

Professor Vince Craig will be overseas for the period 15 - 27 June. He will give a presentation at the International Fine Particle Research Institute AGM in Delaware, USA. He will continue on to visit collaborators in Blacksburg and Kansas State University in the US.

Mrs Jill Middleton and **Dr Michael Turner** will travel to India to provide software training and be away from 17 -26 June.

Department of Quantum Science

Professor Ping Koy Lam will be travelling from 9-17 June to participate as an invited speaker at ICOLS 2013 in Berkeley, California.

Laser Physics Centre

Departmental Administrator **Sonia Pandrun**, will be away from 5 June – 22 July. All enquiries should be forwarded to Professor Wieslaw Krolikowski or Julie Arnold (EME DA)

Electronics Material Engineering

A/Profs Patrick Kluth & Jodie Bradby, Dr Bianca Haberl and PhD's Sherman Wong & Lachlan Smillie will be attending Synchrotron Melbourne to conduct experiments 16-20 June.

Nonlinear Physics Centre

The Nonlinear Physics Centre administrator, **Kathy Hicks** will be away from Monday lunchtime, 17 June and will return on Wednesday 10 July. Martina Landsmann (Applied Maths) will be assisting NLPC staff with any urgent requests over this period.

Plasma Research Laboratories

Dr Matthew Hole of Plasma Theory and Modelling will be overseas from June 15 - July 22. He will be on a research collaboration at the Culham Centre for Fusion Energy, presenting at the European Physical Society Conference on Plasma Physics, representing Australia at the International Fusion Research Council of the IAEA, visiting the Max Planck Institute for Plasma Physics in Garching, Germany, and giving an invited talk at the Asia Pacific Physics Conference in Japan.

OHS BULLETIN

OHS training course venue – now
5 Liversidge Street Building 69.

Electrical Australian design standards (OHS24) - 20 June

To book in for courses login to HORUS

Email: origins@simonsfoundation.org

TOPOLOGICAL DATA ANALYSIS WORKSHOP

A workshop providing both theoretical background and direct practical experience in applying topological data analysis to the challenges of big and complex data.

25 & 26 June 2013

University of Melbourne.

Keynote Speakers:

Professor John Harer, Duke University

Introduction to Persistent Homology and its application to big data

Dr Facundo Memoli, University of Adelaide

Persistence diagrams and shape classification

Dr Vanessa Robins, ANU

Topological image analysis

Ms Kate Turner, University of Chicago

Statistics on persistence diagrams

Day 1 (9:30-4pm) Introduction to Topological Data Analysis, Overview of application areas, Hands-on Software session.

Day 2 (9:30-1pm) Advanced techniques in Topological Data Analysis.

There is no registration fee for this workshop which is co-sponsored by the ARC Centre of Excellence for Mathematics and Statistics of Complex Systems and the Defence Science Institute.

For more details see:

<http://www.defencescienceinstitute.com/content/topological-data-analysis-workshop-25-26-june>