



Research School of Physics and Engineering

Weekly newsletter | Volume 39 Number 30 | 2 - 8 August 2013

DIRECTOR'S COLLOQUIUM



The fifth Director's Colloquium for 2013 had staff and students stepping into the world of Philosophy with the ANU's Prof David Chalmers. His lecture 'Finding Space in a Nonspatial World' took us from a perfect Eden World of colour and space to consider how we locate this experienced world in the different picture of space and time influenced by physical concepts. Hopefully the lecture inspired some interesting discussions around the school. Thanks to Andrea and Jo and their team for preparation of the snacks as always.

VISITORS

Nuclear Physics Department

Professor Phil Walker, Professor Zsolt Podolyak, Dr Robert Carroll, Rachael Wood, from the Department of Physics, University of Surrey, UK, and Dr David Cullen, Schuster Laboratory, University of Manchester, UK, are visiting the Department of Nuclear Physics until 7 August 2013 to undertake collaborative research with the GAMMA group.

CONGRATULATIONS

Congratulations to the winners of the first RSPE 3-Minute Thesis competition that was held last Thursday, 25 July!

Judges vote: equally shared between **Ian Wenas and Dhruv Saxena (both from EME)**. The judges had a tough job trying to determine a winner and eventually decided on two equal winners!

People's Choice – Romana Lester (PRL).

All of the six presenters who participated in this competition did a fantastic job. Well done to all and congratulations to the winners!

Our sincere thanks to the judges – Prof Ray Withers (RSC), Dr Nick Robins (DQS) and Ms Kavitha Robinson (RSPE Development Manager). We would also like to thank John Bartholomew, a PhD student from LPC who did a superb job chairing the competition!

Thank you to all students and staff who came to support the presenters.

PHYSICS PROJECT MARKET DAY

On Tuesday 13th August (11.30am to 2pm) there will be an opportunity for staff to showcase their research and potential projects in Melville Hall to both undergraduate students at all levels as well as graduate students. The event is being held during Science Week and will be heavily promoted by undergraduate lecturers. Hence a strong participation of the undergraduate student cohort is expected.

Academics are strongly encouraged to participate in this event by preparing a poster summarizing their research projects on offer and personally attending Market Day to speak with potential students. This day has been organised in recognition of the challenges faced in attracting students to different research groups across the school.

- RSVP for your attendance at Market Day (market.day.rspe@anu.edu.au) by August 1st.
- Prepare a poster or other material to display at Market Day. Posters must be printed by **August 9th** to assist the SCU in managing the printing load.
- We are happy to discuss individual requirements for displays or demonstrations to make this a fun event during Science Week.

PHYSICS EDUCATION CENTRE REPORT

- ANU Open Day, Saturday 31 August. A free t-shirt for those that attend! Please see your Head of Department if you are interested.
- Spring Education Planning Day, Thursday 12 September

STAFF MOVEMENTS

Electronic Materials Engineering

A/Prof Jodie Bradby will be visiting the Argonne National Lab in Argonne Illinois US 4-9 August for experiments.

A/Prof Patrick Kluth will be attending the 8th Pacific Rim International Congress on Advanced Materials and Processing (PRICM-8) 5-8 August in Hawaii.

Applied Mathematics

Mohammad Saadatfar will be away for the period 24 July - 19 August 2013. During this time he will attend the 2nd International Workshop on Rock Physics in the UK and visit collaborators in Germany.

Vanessa Robins will be away from 29 July to 6 August to attend the SIAM Conference on Algebraic Geometry in the USA.

Vince Craig will be away from 3 - 11 August 2013 to attend the Gordon Conference on Physics and Chemistry of Liquids in the USA.

Plasma Research Laboratory

Professor Christine Charles and Professor Rod Boswell will attend the 21st International Symposium on Plasma Chemistry in Cain from 31 July - 11 August.

Professor John Howard will travel to Korea from 8 - 16 August. **Dr Boyd Blackwell** will be acting HOD during Professor Howard absence.

Mr Michael Blacksell will be away to attend the High Voltage Operating course from 13 August - 17 August.

Nuclear Physics Department

Dr Tibor Kibédi and Dr Gregory Lane, will be overseas in the period 4 - 14 August. They will be visiting the Accelerator Laboratory of University of Jyväskylä, Finland to participate in a PAC-approved experiment "Probing the E0 transitions in 186Pb using the SAGE spectrometer".

Theoretical Physics

Professor Vladimir Bazhanov will travel to Japan from 27 July - 7 August to give an invited talk at the international workshop "Mathematical Statistical Mechanics", to be held at Kyoto University, and to give a colloquium talk at the "Institute of Physics and Mathematics of the Universe" in Tokyo.

DEPARTMENTAL SEMINARS

Theoretical Physics

1. Proximity Effects in Layered Ising Models

Professor Helen Au-Yang

Oklahoma State University

2 pm - 3 pm Wednesday 7 August

Theoretical Physics Seminar Room

Le Couteur Building L.3.17

2. Superintegrable chiral Potts model:

Parafermionic generalization of Ising model

Professor Jacques H.H. Perk

Oklahoma State University

11-12 am Thursday 8 August

Benhard Neumann Seminar Room (G35)

John Dedman Building

Joint Seminar of Nonlinear Physics Center and Optical Sciences Group

Nonlinear Photonics in semiconductor lasers: Solitonic microlasers and spin effects

Professor Thorsten Ackemann

Department of Physics, University of Strathclyde, Glasgow, Scotland, UK

11:00am Friday 9 August

Oliphant Building Seminar Room

All welcome

Nuclear Physics Department

Quantum mechanics and reality

Associate Professor Margaret Reid

Centre for Cold Atoms and Ultrafast Spectroscopy,

Swinburne University of Technology, Melbourne

11:00am, Monday 12 August

Nuclear Physics Seminar Room

OHS BULLETIN

OHS training courses, 5 Liversidge St, Building 69.

Compressed gas and Cryogenic safety - Thursday 8 August

Corrosives-Monday 2 September

Manual Handling - Wednesday 4 September

Laser Safety - Tuesday 17 September

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)