



Research School of Physics and Engineering

Weekly newsletter | Volume 39 Number 49 | 13-19 December 2013

FROM THE DIRECTORS' OFFICE

The Director wishes you all a Merry Christmas and a well-earned Christmas break. Thank you all for your hard work this year!

The Director will be on annual leave from 14 December to 1 January during which time Professor Ken Baldwin will be Acting Director.

The Director will also be away during January with the following Acting Directors:

6-10 January Professor Rob Elliman

13-16 January Professor Ken Baldwin

27-31 January Professor David McClelland

CHRISTMAS MINCE PIES

Please join us for morning tea

10:30am Friday 20 December

RSPE Tearoom

Merry Christmas



CONGRATULATIONS

Department of Quantum Science

Congratulations to PhD students Silvie Ngo and Nick Riesen for winning the student poster prizes at ANZCOP 2013 Conference, Fremantle, WA; and Andrew Wade for winning the best student presenter at ACGRG7 at Hamilton Island, QLD.

RETIREMENTS

As the year end approaches we have many retirements from the School. This year we lose staff with over 240 years of School service collectively. Farewell to Maryla Krolikowski, Keith Fifield, Alan Harding, Alan Cooper, David Kelly, Rob Tidy and Barry Luther-Davies.

FAREWELLS

Electronic Materials Engineering

Farewells **Professor Pedro Grande** who is leaving us on 8 Jan and returning to Federal University of Rio Grande do Sul, Brazil. Professor Grande has been on Sabbatical and working with Professor Rob Elliman.

We also farewell **Dr Boshra Afra** who has been with EME as a Post Doc for the last six months after completing her PhD

and **Dr Matias Rodriguez** who has finished his contract and moving onto other adventures.

OCR PROJECT

Digital invoice processing within Peoplesoft: The Optical Character Recognition (OCR) Project

ANU Finance and Business Services (F&BS) has introduced a scanned invoice system within Peoplesoft. Invoices will be scanned centrally by F&BS Shared Services (ultimately all University invoices will be sent to a central address) and then circulated to the relevant School/Centre for the normal 'goods received' checking, GLC coding, and delegate approval. This system will allow electronic workflow across the University and make tracking of invoice payment easier. All steps currently undertaken within the local areas will still be in place, however, processing will be electronic (incl. delegate approval). This new system has already been rolled out to many parts of the University and RSPE is next in line. Individualised training will be provided to everyone involved. Feel free to talk to your DAs about the OCR Project. Further discussions will be held at the next Forum and HoDs meeting.

DISTINGUISHED LECTURE

Nonlinear Physics Centre

The Fermi Pasta Ulam (FPU) Problem and the Birth of Nonlinear Science

Professor David K Campbell

Department of Physics, Boston University

11:00am Wednesday 18 December

Leonard Huxley Theatre

All welcome

DEPARTMENTAL SEMINARS

Nuclear Physics Department

The Fast Reactor Nuclear power for today and the future

Bill Gemmell

(Formerly with the Atomic Energy Authority (UK) and the Australian Atomic Energy Commission)

11:00am Monday 16 December

Nuclear Physics Seminar Room

Laser Physics Centre /QCQ2T Seminar

Increasing the scalability of rare-earth-ion quantum hardware

Final PhD seminar

Mr John Bartholomew

Laser Physics Centre

10:00am Monday 16 December

RSPE Seminar room

Nonlinear Physics Centre

From actively coupled waveguides to flat bands and Fano lattices

Professor Sergej Flach

Massey University, New Zealand

2:00pm Monday 16 December

Le Couteur Seminar Room (L3.17)

Atomic & Molecular Physics

Quantum Information Science with Trapped Ca⁺ Ions

Professor Rainer Blatt

Institute for Experimental Physics, University of Innsbruck,

Institute for Quantum Optics and Quantum Information,

Austrian Academy of Sciences, Otto-Hittmair-Platz 1, A-6020

Innsbruck, Austria

2:00pm Monday 16 December

RSPE Seminar Room

Nonlinear Physics Centre

Global Phase Space Study of Coherence and Entanglement in a Double-Well Bose-Einstein Condensate

Professor David K. Campbell

Department of Physics, Boston University

2:00pm Thursday 19 December

Oliphant Building Seminar Room

9TH MATERIALS AND COMPLEXITY CONFERENCE AT KIOLOA

Department of Applied Mathematics will be hosting the 9th Materials and Complexity Conference at Kioloa from Monday 15th to Wednesday 17th December at the Kioloa Coastal Campus. This meeting attracts international students and visitors and covers topics ranging from discrete topology to surface chemistry. Most of the Department will be away for this time.

STAFF MOVEMENTS

Atomic & Molecular Physics

Julia Wee Departmental Administrator for AMPL & PRL will be on leave from 25 December and will be back at work on 6 January. PRL and AMPL offices will not be attended until her return.

Electronic Materials Engineering

Professor Mark Ridgway will be on leave 23 December to 24 January 14. **Professor Hoe Tan** will be Acting HOD.

Julie Arnold will be on leave 18 December to 3 January.

Dr Sudha Mokkapati will be an Invited Speaker at 17th International Workshop on The Physics of Semiconductor Devices, December 10-13 December at Amity University,

Noida, India and then also presenting an Invited Talk at the International Conference on Microwave and Photonics at Indian School of Mines, Dhanbad India 13-15 December.

Theoretical Physics

Professor Vladimir Bazhanov, will be traveling to Japan from 9 to 15 January to give an invited talk at the International Symposium RIKKYO MathPhys 2014, to be held in Tokyo. **Dr Vladimir Mangazeev** will take up duties of the Head of Department of Theoretical Physics during this period.

Department of Quantum Science

Departmental Administrator's from DQS **Laura Walmsley & Gaye Carney** will be on leave from 25 December and will be back at work on 6/1/14.

Applied Mathematics

Professor Tim Senden will be away for all of January. Acting Heads of Department will be **Vince Craig** 2-10 January, **Adrian Sheppard** 13-16 January and **Stephen Hyde** for the period 20-31 January 2014.

Martina Landsmann will be on annual leave from Monday 23rd December 2013, returning to work on Monday 6th January 2014.

Nuclear Physics

Petra Rickman will be away from Monday 16 December 2013 until 28 January 2014. All urgent matters should go to **Professor David Hinde** directly.

RSPE SOCIAL CLUB

RSPE Social Club is kicking off with lots of events, so come along, meet some new people and have fun! All students and staff are welcome. **Friday 13th December: A free BBQ from 5:30pm in the RSPE BBQ area**, preceded by **short lab tours** of the AMPL/CAMS positron lab and EME's MOCVD, meeting in the RSPE tea room at 5pm. Please RSVP to jenny.nianjiang@anu.edu.au; let us know about any dietary needs, vegos will be catered for!

As an optional extra, join us in supporting the **RSPE-based band Zoopagoo from 8pm** as they celebrate a spooky **Friday 13th at ANU Bar**. Entry is \$20 or \$15 with a monster-themed costume!