



Research School of Physics and Engineering

Weekly newsletter | Volume 39 Number 26 | 5 – 11 July 2013

FROM THE DIRECTOR'S OFFICE

The Director will be on leave from Wednesday 3rd - Wednesday 10th June. **Professor John Close** will be Acting Director for this period.

The Director will then travel to Japan 15- 22 July for an invited talk at APPC12 and for a plenary lecture POSMOL 2013. **Professor Ken Baldwin** will be Acting Director for this period.

CONGRATULATIONS

Congratulations to PhD student *Matt Thompson* and supervisor *Dr Cormac Corr* who have been awarded a SIEF John Stocker Postgraduate Scholarship to undertake the project "Ion interactions with fusion relevant materials" and involves collaboration with ANSTO and the Dutch Institute DIFFER.

DIRECTOR'S COLLOQUIUM



Professor Lawrence Krauss

After July 4th-themed snacks of donuts and hotdogs, staff, students and visitors packed the Huxley Lecture theatre to capacity for a colloquium by the theoretical physicist, cosmologist and best-selling author Professor Lawrence Krauss. July 4th 2013 was the one-year anniversary of the announcement of the Higgs Boson discovery. Professor Krauss took us on a journey of this remarkable discovery focusing on the importance of unification of ideas in science. The colloquium received thunderous applause and the scope of the questions showed that the audience was engaged by the always enthusiastic Professor Krauss.

The colloquium committee would also like to thank Jo, Andrea and Julie for doing such a terrific job with the snacks. Thanks girls!

SCHOOL SEMINAR

Nonlinear Photonic Crystals for Optical Frequency Conversion

Dr Yan Sheng

Laser Physics Centre, RSPE, ANU

4pm, Thursday 18 July

Leonard Huxley Lecture Theatre

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

ALL WELCOME

WELCOME

Nuclear Physics Department

Welcomes *Mr Nick Withers*, Embedded Systems Programmer for the Department. Nick will work closely with the Accelerator Computer Manager to design and implement a new embedded data acquisition system for the Heavy Ion Accelerator. Nick is located in office 2.26, ext.no 52091. Welcome Nick!

STAFF MOVEMENTS

Applied Mathematics

Professor Tim Senden will be on leave from 2- 14 July. **Dr Vanessa Robins** will take up duties as Head of Department for that period.

Professor Vince Craig will visit collaborators in Germany and continue on to the Aqua Incognita - Galileo 400 years on - The Florentine Debates to be held in Florence, Italy for the period of 6 - 21 July.

Emeritus Professor Barry Ninham is one of the organisers of the Aqua Incognita Debate and has been overseas since 6 June, returning 22 July.

Professor Stephen Hyde who is at the Niels Bohr Institute, Denmark, for the period 28 May - 18 October will also attend the Aqua Incognita Debate for the period 13-21 July.

Dr Drew Parsons and Mr Timothy Duignan will also attend the Aqua Incognita Debate, and then visit the Marcoule Institute in France. Both are leaving 11 July, Mr Duignan will return 27 July and Dr Parsons on 31 July.

Dr Mohammad Saadatfar, Dr Nicolas Francois (from PRL, attending as part of his work at AM) and Occupational Trainee **Ms Maryam Hanifpour** will attend the Powders and Grains 2013 in Sydney where they will present several posters. They will be away for the period 7 - 12 July.

Plasma Research Laboratory

Dr Cormac Corr is an invited speaker at the International Conference on Phenomena in Ionized Gases (ICPIG) from 14-19 July in Granada, Spain.

Nuclear Physics Department

Dr Anton Wallner will be overseas 5 - 28 July. He will be attending the Technical Meeting on "Toward a New Evaluation of Neutron Standards" being held at the International Atomic Energy Agency, Vienna, Austria.

Electronics Material Engineering

Dr Bianca Haberl will be attending The Twenty-Fourth Biennial International Conference of the International Association for the Advancement of High Pressure Science and Technology (AIRAPT) in Seattle US on 7 – 12 July and also visiting with collaborators at the Geophysical Laboratory in Washington and Argonne National Laboratory in Chicago from 12 July - 11 August.

Atomic and Molecular Physics

Professor Anatoli Kheifets will be overseas from 30 June – 31 August. He will give seminars and conduct collaborative work with Universities of Stockholm and Vienna. He will present his works at the Attosecond Physics Conference in Paris, the Workshop on Intense field-Short Wavelength Atomic and Molecular Processes (ISWAMP) in Xi'an and The International Conference on Photonic, Electronic and Atomic Collisions (ICPEAC) in Lanzhou (China). He will chair a session at the ISWAMP and present a report to the Executive Committee of the ICPEAC on the 2017 conference to be held in Australia.

ROBERT AND HELEN CROMPTON AWARD 2013

Nominations are being sought for the Robert and Helen Crompton Award 2013.

This Award provides funding of up to \$20,000 to assist postgraduate research students enrolled at the Research School of Physics and Engineering to undertake part of their research program overseas or make a collaborative visit to an overseas institution, for 3 to 6 months.

The closing date for applications is 15th July 2013. Please e-mail applications to research.students@physics.anu.edu.au by 5pm 15th July 2013.

For enquiries, please contact Luda or Karen on research.students@physics.anu.edu.au

PHYSICS EDUCATION REPORT

I hope all staff involved in teaching are enjoying the teaching break. Second semester starts on Monday 22nd of July. I would like to remind staffs who have students from first semester who need to complete supplementary exams that those exams need to be completed no later than the first week of second semester. If you have not yet contacted those students needing a supplementary exam, now would be a good time to do so.

The honours students have now completed their coursework and are concentrating on their projects. I will contacting staff in the next weeks to act as examiners of this year's honours theses.

PHYSICS PROJECT MARKET DAY

On 13th August 2013 (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.

Recent feedback from students has highlighted a number of obsolete projects in the current database. Hence the school also will be taking this opportunity to refresh the RSPE online project database. Academics will be required to:

- Upload projects by July 29th via a new editable webbased interface (accessible from July 5th). https://physics.anu.edu.au/intranet/dbadmin/profiles/s tudentprojects.php
- RSVP for your attendance at Market Day (<u>market.day.rspe@anu.edu.au</u>) 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.

It should be noted that the existing project database will be removed on August 1st and then the new database will go live. We are happy to discuss individual requirements for displays or demonstrations to make this a fun event during Science 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)