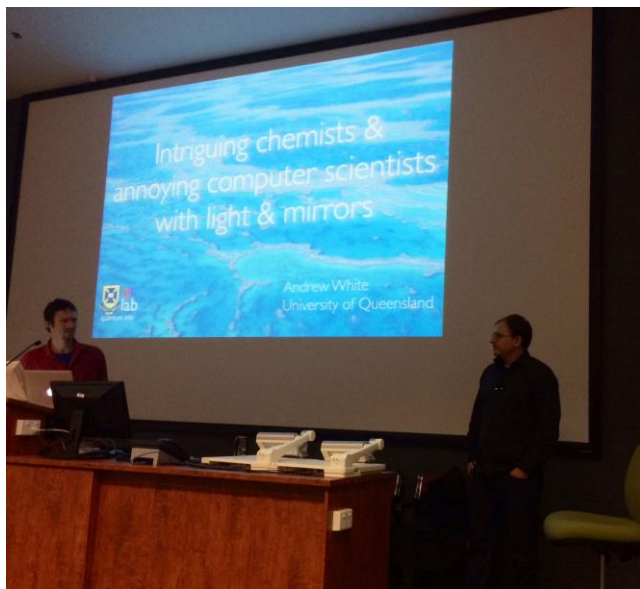




## Research School of Physics and Engineering

Weekly newsletter | Volume 40 Number 19 | 9 – 13 June

### DIRECTOR'S COLLOQUIUM



This month's Director's colloquium was delivered by **Professor Andrew White** from the University of Queensland. He delivered an entertaining walk through the history and future prospects of quantum computing. There are currently several prototype platforms for quantum computing, including ion traps, solid state, superconducting and photonic systems. The focus of Andrew's work is photonic quantum systems, which he has used to demonstrate model quantum chemistry calculations and boson sampling.

### SCHOOL SEMINAR



**Biophotonics with a twist: the chiral Gyroid photonic crystal in butterfly wing-scales**

**Dr Gerd Schröder-Turk**

Applied Mathematics, RSPE

**4:00pm Thursday 26 June**

Leonard Huxley Lecture Theatre

*Drinks and nibbles will be held in the RSPE Tearoom after the seminar*

### UPDATE OF WEBPAGES

As part of an update and revamp of our webpages, we're asking people for their feedback on what the priorities of the new pages should be via the Apollo form at:

<https://apollo.anu.edu.au/apollo/default.asp?pid=8132>

Please note the revised address.

### WELCOME AND FAREWELL

#### **Non Linear Physics**

**Professor Chaohong Li**, a visitor from Sun Yat-Sen University, Guangzhao, China, is arriving today for a three month visit with NLPC.

He will have a desk in L1.05

Telephone – 51745

Email – [lichaoh2@mail.sysu.edu.cn](mailto:lichaoh2@mail.sysu.edu.cn)

#### **Electronic Materials Engineering**

Farewell to **Dr Pawel Sajewicz** who leaves us to work for a short time in UNSW. Pawel has been with EME for over two years working with Professor Chennupati Jagadish's group.

### PHYSICS PROJECT MARKET DAY

On 19th August 2014 (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.

**Further information will be provided in the coming weeks.**

### DEPUTY DIRECTOR TECHNOLOGY DEVELOPMENT

#### **Attention Technology Developers!**

In conjunction with RSPE the Technology Transfer Office will be holding a series of workshops over the next few months. All staff and students are welcome.

1st July: **Licensing 101** (3 hr) - good as a refresher or for the novice.

5th August: **Establishing a Start-Up** (3 hr) - basics covered, funding, marketing and stories shared.

2nd September: **Industry Engagement** (3 hr) - A guide to presenting your ideas and maintaining relationships with industry.

The workshops run the first Tuesday of each month starting at 9:30 in the Link Seminar Room.

**For catering purposes please register with Tim Senden 2 days before each workshop.**

## PROMOTIONS

The 2014 Academic Promotions round opens on **1 June 2014** and applications will close on **31 July 2014**.

Many aspects of the academic promotions round have changed this year. These changes are summarized in the [information sheet](#) on the [Academic Promotions webpage](#).

The School promotions round will be coordinated through the RSPE Director's Office with support from Tim Gray from College HR. Could you please send an email to [Director.RSPE@anu.edu.au](mailto:Director.RSPE@anu.edu.au) with your intention to apply including your name, current level and the promotion level by **close of business on Friday, 27 June 2014**.

Several information sessions for both supervisors and staff members will be held throughout May, and June. Please see the Academic Promotions webpage for information on dates, times and locations for these sessions. The first of these was held on Tuesday 13 May. Please don't hesitate to contact Tim Gray ([tim.gray@anu.edu.au](mailto:tim.gray@anu.edu.au) /52580) or Andrea Butler ([Director.RSPE@anu.edu.au](mailto:Director.RSPE@anu.edu.au) /52476) if you have any questions relating to the process.

## BEN WILLIAMS STUDENT SUPPORT GRANT

The Ben Williams Student Support Grant is now available for all undergraduate and postgraduate physics students enrolled at the Research School of Physics and Engineering. The fund will provide assistance to students who are experiencing difficulties including financial hardship and/or health/well-being issues that are preventing them from completing their program.

Applications are accepted all year round.

**Further information and to apply:**

E: [rspe.hdr.sa@anu.edu.au](mailto:rspe.hdr.sa@anu.edu.au)

T: +612 6125 5195 / +612 6125 1315

<http://students.anu.edu.au/scholarships/ea>

## 3 MINUTE THESIS COMPETITION

The [3MT](#) international research student competition is on again for 2014 and the Australian National University is currently preparing for the school heat, college and ANU finals of the **3 Minute Thesis competition**.

The school encourages all research students to participate in this exciting and rewarding competition. To ensure you do well the school recommends that you attend as many as possible of the ANU 3MT workshops on offer, with the first one scheduled for **Thursday 26 June** in Room N1.01, CSIT (Computer Science and Information Technology) Building 108.

The school's 3MT heat (including a light lunch) will be held on **24 July 2014**, followed by the College final in August ready for the final ANU 3MT competition on Wednesday 17 September 2014.

All students are most welcome to attend the 3MT launch party on Thursday 12 June. This event will officially kick off the ANU 3MT season. Please register via <http://3mtlaunchparty.eventbrite.com.au>.

In regard to prizes on offer, for ANU college 3MT winners will receive \$1,000 research support grant and up to \$4,000 on offer for ANU final 3MT winners.

Further information: [rspe.hdr.sa@anu.edu.au](mailto:rspe.hdr.sa@anu.edu.au)



## ROBERT AND HELEN CROMPTON AWARD

Nominations are being sought for the Robert and Helen Crompton Award 2014. This Award provides funding of up to \$15,000 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 three to six months. **Applications will open 1 June 2014 and close 30 June 2014**. Please send your application to [rspe.hdr.sa@anu.edu.au](mailto:rspe.hdr.sa@anu.edu.au) by 5pm 30 June 2014.

For enquiries and Conditions of Award, please contact the RSPE student office via [rspe.hdr.sa@anu.edu.au](mailto:rspe.hdr.sa@anu.edu.au).

## GEOMETRY AND TOPOLOGY OF LIQUID CRYSTALS AND RELATED ORDERED MATERIALS

Interested students and staff are welcome to attend the second International PhD School on

'Geometry and Topology of Liquid Crystals and Related Ordered Materials' which will be held **August 12- 16, 2014 at RMIT University in Melbourne**.

The School will consist of short lectures, longer exercises and physical and virtual pattern constructions, as well as research lectures from Australian, European and Asian scientists on structural aspects of soft condensed materials and chemical frameworks.

There will be no School fees. Detailed information from Stephen Hyde in Applied Maths ([stephen.hyde@anu.edu.au](mailto:stephen.hyde@anu.edu.au)).

See page 3 for more information.

Applications close 20 June

## SCHOOL EVENT CALENDAR

The School has introduced a new calendar on the intranet that includes upcoming events and meetings within RSPE. The calendar contains dates for Founder's Day, School Forums, Heads of Department meetings, Seminars and the Director's Colloquia. You can view the calendar online [RSPE event calendar](#) or subscribe to it using Outlook, iCal or Google Calendar.

Please contact [Director.RSPE@anu.edu.au](mailto:Director.RSPE@anu.edu.au) regarding adding items to the calendar.

**2ND INTERNATIONAL PHD SCHOOL**

# GEOMETRY AND TOPOLOGY OF LIQUID CRYSTALS AND RELATED ORDERED MATERIALS

**STRUCTURAL FUNDAMENTALS AND  
EXPERIMENTAL DETERMINATION FROM  
A MODERN GEOMETRIC PERSPECTIVE**

**RMIT UNIVERSITY, MELBOURNE  
AUGUST 12-16, 2014**

[geometrytopologymaterials@gmail.com](mailto:geometrytopologymaterials@gmail.com)

