

# Weekly Bulletin

Research School of Physical Sciences & Engineering

Volume 33 Number 17  
11 – 17 May 2007

## FOUNDER'S DAY 2007

Please note that Founder's Day will be held on Friday 19 October, not on Friday 12 October, as previously advised. More information will be provided nearer the date.

## SCHOOL COLLOQUIUM

**THURSDAY 17 MAY 2007**

4.00pm

“Acoustics of Musical Wind Instruments - And of Musicians”

by Professor Joe Wolfe, School of Physics, The University of New South Wales.

**LEONARD HUXLEY LECTURE THEATRE**

**Drinks and light refreshments will be provided in the RSPSE Link Tea Room after the Colloquium**

**ALL WELCOME**

## SCHOOL SEMINAR

**WEDNESDAY 16 MAY 2007**

11.00am

“Solitons in strongly driven discrete nonlinear Schrödinger-type models”

by Professor Fatkhulla Abdullaev

Uzbek Academy of Science, Tashkent, Uzbekistan  
Link Building Seminar Room

Discrete solitons in the Ablowitz-Ladik (AL) and discrete nonlinear Schrödinger (DNLS) equations with damping and strong rapid drive are investigated. The averaged equations have the forms of the parametric AL and DNLS equations. An additional type of parametric bright discrete soliton and cnoidal waves are found and their stability is analyzed. The analytical predictions of the perturbed inverse scattering transform are confirmed by the numerical simulations of the AL and DNLS equations with rapidly varying drive and damping.

## SCHOOL FORUM NOMINATIONS

A reminder that nominations for representatives and alternates from departmental technical officers, departmental administrators, students, and non-tenured academic staff close at **5pm on Friday, 11 May 2007**. Completed nomination forms to be received by Helen McMartin in the School HR Office.

## LASER SAFETY

There is an ANU Laser Safety course being run on Thursday 17 May. Those who work with lasers and have not already done the course should enroll on the ANU Occupational Health and Safety web site. The site will also give further details.

## STAFF MOVEMENTS

Professor Murray Batchelor and Dr Xiwen Guan will be absent from 13-27 May for research collaboration at the Institute for Solid State Physics at the University of Tokyo. They will also attend the University of Tokyo workshop on Physics and Mathematics of Interacting Quantum Systems in Low Dimensions, 24-26 May, at which Professor Batchelor will give an invited talk. Professor Vladimir Bazhanov will be Acting Head during this period.

Professor Jagadish, EME, will attend Meetings of the New Materials, Technology and Services Advisory Group of the New Zealand Foundation for Research Science and Technology 7-9 May. He will then continue to Brisbane to give a seminar at the Australian Institute of Bioengineering and Nanotechnology, University of Queensland, 10 May.

Michael Gao, EME, will present an invited talk at SIMC 14th Semiconducting and Insulating Materials Conference 15-20 May, Arkansas.

Professor Rob Elliman HOD, EME, will be away from 18 May - 6 June visiting the Institute of Physics, London, then Salford University and

Manchester Metropolitan University to discuss the joint organisation of Workshop 2008 and also present research seminars. Rob will then continue to attend the E-MRS Fall Meeting in France and will present an invited talk.

EME welcomes a new Postdoc from Brazil - Dr Douglas Da Silva. He and his family have just arrived in Australia and Dr Da Siva will be working with Dr Mark Ridgway on several semiconductor projects.

### **VISITING STUDENT**

The Department of Nuclear Physics is pleased to welcome Caroline Buwalda, a 4th year Electronics student (specialising in Nuclear Science) from The National Graduate School of Engineering, Caen, France. Caroline will be undertaking a period of practical training with us until 5 August, under the guidance of Professor David Hinde and Dr Nanda Dasgupta.

### **CONGRATULATIONS**

Congratulations to Dragomir Neshev and Ruth Jarvis on the birth of their baby boy, Nicholas.

The Department of Theoretical Physics would like to congratulate Vladimir and Lena Mangazeev on the birth of their baby daughter, Natalie.

EME would also like to congratulate Bernt Johanessen and his wife Gladys on the birth of their baby boy, Marcus.

### **FROM SCHOOL FACILITIES & SERVICES MANAGER**

Please take up the option of entering into HORUS and ISIS a mobile phone number that could be used in case of a University Emergency. This will enable you to be contacted in case of a major "event" on campus - especially one that would require a significant response from all of us.

### **GRANTS & AWARDS**

#### **National Academy of Sciences**

Program Number: 61789

Title: Troland Research Awards

E-mail: [awards@nas.edu](mailto:awards@nas.edu)

Web Site:

[http://www.nasonline.org/site/PageServer?pagename=AWA\\_RDS\\_how\\_to\\_nominate](http://www.nasonline.org/site/PageServer?pagename=AWA_RDS_how_to_nominate)

Program URL:

<http://www.nasonline.org/site/PageServer?pagename=AWA>

#### **RDS troland**

Two awards are given to young investigators (age forty or younger) to recognize unusual achievement and further empirical research in psychology regarding the relationships of consciousness and the physical world.

**Deadline(s): 10/09/2007**

Link to full program description:

[http://australia.infoed.org/spin/spin\\_prog.asp?61789](http://australia.infoed.org/spin/spin_prog.asp?61789)

#### **National Academy of Sciences**

Program Number: 61791

Title: Award for Scientific Reviewing

E-mail: [awards@nas.edu](mailto:awards@nas.edu)

Web Site:

<http://www.nasonline.org/site/PageServer?pagename=AWA>

[RDS how to nominate](#) Program URL:

[http://www.nasonline.org/site/PageServer?pagename=AWA\\_RDS\\_scirev](http://www.nasonline.org/site/PageServer?pagename=AWA_RDS_scirev)

The sponsor makes an award to recognize authors whose reviews have synthesized extensive and difficult material, rendering a significant service to science and influencing the course of scientific thought.

**Deadline(s): 10/09/2007**

Link to full program description:

[http://australia.infoed.org/spin/spin\\_prog.asp?61791](http://australia.infoed.org/spin/spin_prog.asp?61791)

#### **National Academy of Sciences**

Program Number: 61793

Title: Public Welfare Medal

E-mail: [awards@nas.edu](mailto:awards@nas.edu)

Web Site:

<http://www.nasonline.org/site/PageServer?pagename=AWA>

[RDS how to nominate](#) Program URL:

[http://www.nasonline.org/site/PageServer?pagename=AWA\\_RDS\\_pwm](http://www.nasonline.org/site/PageServer?pagename=AWA_RDS_pwm)

The sponsor makes an award in recognition of distinguished contributions in the application of science to the public welfare.

**Deadline(s): 10/09/2007**

Link to full program description:

[http://australia.infoed.org/spin/spin\\_prog.asp?61793](http://australia.infoed.org/spin/spin_prog.asp?61793)

#### **National Academy of Sciences**

Program Number: 80073

Title: John J. Carty Award for the Advancement of Science

E-mail: [awards@nas.edu](mailto:awards@nas.edu)

Web Site:

<http://www.nasonline.org/site/PageServer?pagename=AWA>

[RDS How to Nominate](#)

Program URL:

[http://www.nasonline.org/site/PageServer?pagename=AWA\\_RDS\\_carty](http://www.nasonline.org/site/PageServer?pagename=AWA_RDS_carty)

The sponsor provides an award for noteworthy and

distinguished accomplishments in any field of science within the charter of the Academy. Specific fields were established by the Academy Council beginning with the 1961 award.

**Deadline(s): 10/09/2007**

Link to full program description:

[http://australia.infoed.org/spin/spin\\_prog.asp?80073](http://australia.infoed.org/spin/spin_prog.asp?80073)

### **Association for Symbolic Logic**

Program Number: 84297

Title: Sacks Prize

E-mail: [asl@vassar.edu](mailto:asl@vassar.edu)

Program URL: <http://www.aslonline.org/info-prizes.html>

The Sacks Prize is awarded for the most outstanding doctoral dissertation in mathematical logic. Nominations should be made by the thesis adviser.

**Deadline(s): 30/09/2007**

Link to full program description:

[http://australia.infoed.org/spin/spin\\_prog.asp?84297](http://australia.infoed.org/spin/spin_prog.asp?84297)

### **Society for Imaging Informatics in Medicine**

Program Number: 80431

Title: Grants Program

E-mail: [grants@siimweb.org](mailto:grants@siimweb.org)

Program URL:

<http://www.siimweb.org/WorkArea/showcontent.aspx?id=2506>

The sponsor offers support for original research to advance computer applications and information technology in medical imaging. Two grants of \$50,000 are available.

**Deadline(s): 01/08/2007**

Link to full program description:

[http://australia.infoed.org/spin/spin\\_prog.asp?80431](http://australia.infoed.org/spin/spin_prog.asp?80431)

### **Optical Society of America**

Program Number: 83924

Title: Joseph W. Goodman Book Writing Award

E-mail: [awards@osa.org](mailto:awards@osa.org)

Program URL:

<http://www.osa.org/aboutosa/awards/osaawards/awardsdesc/goodmanbookaward/default.aspx>

The sponsor provides an award to recognize authorship of an outstanding book in the field of optics and photonics, published in the last six years, that has contributed significantly to research, teaching, or the optics and photonics industry.

**Deadline(s): 01/08/2007**

#### **DEADLINE NOTE**

This award is presented on a bi-annual basis.

Link to full program description:

[http://australia.infoed.org/spin/spin\\_prog.asp?83924](http://australia.infoed.org/spin/spin_prog.asp?83924)

### **Wolf Foundation**

Program Number: 14735

Title: Wolf Foundation Prizes in the Sciences and Arts

E-mail: [wolffund@netvision.net.il](mailto:wolffund@netvision.net.il)

Program URL:

<http://www.wolffund.org.il/main.asp?idMain=20>

Five or six prizes of \$100,000 each are awarded annually to outstanding scientists and artists, irrespective of nationality, for achievements in the interest of mankind and friendly relations among peoples. In science, annual awards are made in agriculture, chemistry, mathematics, medicine, and physics. Arts prizes in architecture, music, painting and sculpture will be given.

**Deadline(s): 31/08/2007**

Link to full program description:

[http://australia.infoed.org/spin/spin\\_prog.asp?14735](http://australia.infoed.org/spin/spin_prog.asp?14735)

### **University of New South Wales**

Program Number: 85059

Title: Taste of Research Summer Scholarships

E-mail: [scholarships@eng.unsw.edu.au](mailto:scholarships@eng.unsw.edu.au)

Web Site: <http://www.eng.unsw.edu.au/>

Program URL:

<http://www.eng.unsw.edu.au/current/scholar/tasteof.htm>

Applications are invited for Scholarships within the Engineering Faculty. Each scholarship is valued at \$400 per week (tax free) for a period of ten weeks between November 26, 2007 and February 15, 2008. All scholarships will be conducted at UNSW and are open to full-time local and international students.

**Deadline(s): 27/09/2007**

#### **DEADLINE NOTE**

Applications will be available for download on 10 August 2007, and will be accepted until 27 September 2007.

Link to full program description:

[http://australia.infoed.org/spin/spin\\_prog.asp?85059](http://australia.infoed.org/spin/spin_prog.asp?85059)