

**Integrable Day 2005
Melbourne, Australia
9:30-17:00, Monday 8th August 2005**

A one day workshop on integrable systems and related areas

Venue: Melbourne facility of the AMSI
111 Barry Street, Victoria Australia 3010

A project of the ARC Centre of Excellence for Mathematics and Statistics of
Complex Systems, and supported by the Australian Mathematical Sciences Institute.

Participants/Speakers

- Peter Forrester, University of Melbourne
- Pilar R. Gordoa, Universidad Rey Juan Carlos
- Kenji Kajiwara, Kyushu University
- Jean-Marie Maillard, Université Pierre et Marie Curie
- Ken-ichi Maruno, Kyushu University
- Jim Pettigrew, University of NSW
- Andrew Pickering, Universidad Rey Juan Carlos
- John Roberts, University of NSW
- Reinout Quispel, LaTrobe University
- Wolfgang Schief, University of NSW
- Takahiro Shiota, Kyoto University
- Nicholas Witte, University of Melbourne

Organisers:

Dr. Nicholas Witte N.Witte@ms.unimelb.edu.au,

Professor Reinout Quispel R.Quispel@latrobe.edu.au

Program

Talks will be 30-35 minutes duration with 5-10 minutes for discussion and questions. Data projection facilities are available, using either the overhead projector or with a supplied laptop.

9:30 Start

9:40 Peter Forrester, University of Melbourne

Some asymptotic problems in Painlevé systems arising from random matrix theory

10:20 Kenji Kajiwara, Kyushu University

Symmetries and hypergeometric solutions to the q -Painlevé equations

11:00-11:20 Coffee break

11:20 Ken-ichi Maruno, Kyushu University

Classification of patterns of line solitons in $2+1$ dimensional discrete integrable systems

12:00 Andrew Pickering, Universidad Rey Juan Carlos

Some applications of non-isospectral scattering problems.

12:40-14:00 Lunch

14:00 John Roberts, University of NSW

Creating and relating 3-dimensional integrable maps

14:40 Jim Pettigrew, University of NSW

Phase portraits and periodic orbits of planar integrable maps via the associated Weierstrass cubic

15:20-15:40 Coffee break

15:40 Wolfgang Schief, University of NSW

Integrable discrete differential geometry of 'plated' membranes in equilibrium

16:20 Pilar R. Gordoa, Universidad Rey Juan Carlos

Reduction of order by modification

17:00 Conclusion