

MATHEMATICS AND STATISTICS

NEWSLETTER

September-November 2005

WELCOME

- Welcome to our two Teaching Fellows, Alexandra Cran-McGreechin and Stuart King, who are covering for Clare Parnell while she is on maternity leave this semester. Alexandra is well known to us, being a graduate of St Andrews and is presently completing a PhD with Andy. Stuart is the husband of Ruth, one of our lecturers in Statistics, and is finishing his Cambridge PhD. Stuart is in room 101. They will be assisting mainly with the compulsory honours modules.
- Welcome to our two new Research Fellows in the Algebra and Combinatorics Group, Alan Cain and Vince Vatter. Alan is familiar to us, having recently completed his PhD here with Nik and Edmund; Vince joins us from Rutgers, New Jersey, and is in the process of finishing his PhD .
- A warm welcome to all the new research students who have recently started their studies in St Andrews. In the Analysis Group we welcome Aaron Sloan and James Trimble, our own former undergraduates, and Jun Miao who joins us after completing an MSc at King's College London. In the Vortex Dynamics Research Group we welcome David Devlin, another former St Andrews undergraduate. David is working on a project funded by the UK EPSRC and the Met Office. The Algebra Group welcomes Fiona Brunk, Stuart Morgan and Yann Peresse; Fiona and Yann are well known to us, having graduated from here last year; Stuart joins us after completing his undergraduate degree at Liverpool. *Still waiting for Solar and Stats contributions.*
- Welcome to Professor Yuzef Zhugzhda, who is visiting the Solar Group for 6 weeks from 15th September. Yuzef is well known for his many papers in solar MHD, especially connected with sunspots and with MHD waves. Formerly he was much involved with the Soviet space programme, but since

his retirement he has spent several years in the Kiepenheuer Institute for Solar Physics, Freiberg, working with Prof Stix on such topics as p-modes in the presence of convection and MHD waves in thin flux tubes. During his visit, he will share an office with Toni.

CONGRATULATIONS

- Many congratulations to Colin Campbell on being elected as President of the Edinburgh Mathematical Society, Scotland's leading learned Society for mathematics. He has served the Society in a variety of roles. In 1980 he was Secretary of the Edinburgh Mathematical Society St Andrews Colloquium, from 1985 to 1999 was Managing Editor of the Proceedings of the Edinburgh Mathematical Society and was elected vice-president in 2004.
 - Congratulations to George Phillips on the publication of his latest book, 'Mathematics Is Not a Spectator Sport', Springer-Verlag, New York. This book is the fifth in a sequence (not a series) of books published alternately since 2000 by the two occupants of Room 206. These are all published by Springer-Verlag, and a sixth book in the sequence is in the pipeline.
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SEMINARS, LECTURES, RESEARCH VISITS

- Alan Cairns gave an invited talk at a plasma physics meeting held at the Abdus Salam International Centre for Theoretical Physics in Trieste in September.
- Delaram Kahrobaei gave a Topology Seminar in Oxford University, on 24th October.
- James Mitchell gave a seminar in Lisbon on 21st October, entitled 'Largest subsemigroups of the full transformation monoid'.
- Ersin Ozugurlu gave two seminars in Turkey in September: the first on 2nd September at TOBB-ETU (The Union of Chambers and Commodity Exchanges of Turkey - Economy and Technology University), Ankara, entitled 'Vortex interactions in quasi-geostrophic flows', and the second at Bogazici University, Istanbul, on 7th September.

- Ineke De Moortel and Brigitta von Rekowski attended the 11th European Solar Physics Meeting, which was held in Leuven (Belgium) from 12th - 16th September. Ineke gave a contributed talk on ‘3D numerical simulations of magnetic reconnection driven by rotational footpoint motions’ and Brigitta presented a poster.
- David Dritschel, Jean Reinaud, Riwal Plougonven (St Andrews) and Laurent Joly (ENSICA, Toulouse) organised an International Conference on High Reynolds Number Vortex Interactions, 29th -31st August, held at ENSICA in Toulouse, France. The Conference was a huge success, attracting many of the leading researchers in Vortex Dynamics (both in ‘Aeronautics’ and in ‘Geophysical Fluid Dynamics’) from many different countries (UK, Japan, USA, France, Italy, Germany, Israel etc...). Participants enjoyed discussions in a serene and convivial atmosphere. For full details a web-page (including a book of extended abstracts) is available at <http://www-vortex.mcs.st-and.ac.uk/jean/toulouse/conference.html>. Participants also very much enjoyed the charms of Toulouse’s many beautiful buildings, and its regional cuisine (... not only the duck confit, though sometimes one felt like having duck three times a day ...). The Vortex Dynamics Group was well represented during the event, with David Dritschel, Jean Reinaud, Riwal Plougonven and William McKiver giving talks, and with Ross Bambery, Ersin Ozurgurlu and Jemma Shipton presenting posters (on display throughout the meeting). Jean co-authored a talk presented by Laurent Joly (Jean’s PhD supervisor and current close collaborator). A sequel Conference is now being considered in three years time.
- Jean Reinaud visited Laurent Joly at ENSICA, Toulouse, during 22nd -26th August, prior to the Conference mentioned above, to work on a collaborative project and to help finalise organisation of the conference.
- Kenneth Falconer has been making the most of his research leave with a trip to Finland where he visited the Universities of Helsinki and Jyväskylä, both with strong departments in geometric measure theory. During the visit he gave talks to the Finnish Mathematical Society and the Functional Analysis Seminar in Helsinki, and to a regional meeting of the Finnish Mathematical Society in Jyväskylä, which all attracted large audiences. Unlike Scotland, the weather for the first half of October in Finland was dry and sunny until 22nd October when the winter snow arrived and the temperature dropped to -10C.

- The International Review of UK Mathematics last year identified mathematical analysis as one of the areas of mathematics that was underrepresented in Britain compared with its international standing. As a result of this the EPSRC set up a select working group to propose ways of enhancing support for analysis. Kenneth Falconer was one of the members of the group, along with John Toland, John Ball and Alistair Gillespie.
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NEXT ISSUE

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