

MATHEMATICS AND STATISTICS

NEWSLETTER

March - April 2008

WELCOME

- A warm welcome (back) to Tibor Toeroek, who visited the Solar Group from Paris to collaborate with Vasilis during the week of 21 April. Some of you may remember Tibor from his time here (a bit over a year) in 2003/2004 as a visiting PhD student in the PLATON network. He then worked as a PostDoc at MSSL before joining the Solar Group at the Observatoire de Paris, Meudon, as a SOLAIRE network PostDoc last year.
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CONGRATULATIONS

- Dr. Madhu Bhattacharjee, together with Dr. Daniel Barker from the School of Biology, received funding from the Scottish Bioinformatics Forum to organise a one day workshop on Comparative Genomics in St Andrews. They further received financial support from several Schools of the University. The event will take place on 13th of June and organisation is in progress, see webpage: http://www.sbforum.org/events.php?e_id=41
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SEMINARS, LECTURES, RESEARCH VISITS

- Jean Reinaud visited the “Institut Supérieur de l’Aéronautique et de l’Espace” (ISAE) at the ENSICA campus in Toulouse as “Professeur Invité” during 3-14 March and 24 March-4 April. Jean collaborated with Professor Laurent Joly on two-dimensional turbulent mixing of inhomogeneous gases. Laurent is not a stranger to St Andrews as he has already visited us twice in the past and was the PhD supervisor and long-time collaborator of Jean and of Jerome Fontane (newly appointed Marie Curie Research Fellow in the Vortex Group).

During his research visit in Toulouse, Jean gave two invited seminars. The first one was held at the ISAE on vortex interactions between equal potential-vorticity (PV) quasi-geostrophic (QG) vortices. The second seminar was held at the “Institut de Mécanique des Fluides de Toulouse” (IMFT) on vortex interactions between unequal PV QG vortices.

- Colin Campbell, Max Neunhoffer and Colva Roney-Dougal attended ‘Groups and Computation V’ held at the Ohio State University, Columbus, Ohio from 17-21 March. Max spoke on ‘Short(er) SLPs in group recognition’ and Colva on ‘Automorphisms of classical groups: Definitions and algorithms’.
- The British Mathematical Colloquium was held in York, 25 - 28 March 2008. Edmund Robertson gave the History of Mathematics Lecture on ‘The Edinburgh Mathematical Society: the first 50 years (1883 - 1933).’ There was a very active Semigroups Splinter Group at the Colloquium which extended beyond the official end of the meeting. St Andrews speakers in this Splinter Group were Nik Ruskuc, James Mitchell, Alan Cain, Bob Gray, and Victor Maltcev. Colin Campbell, Yan Peresse and Tony Samuel also attended the Colloquium.

Another feature of the Colloquium was a video of a conversation with Walter Ledermann who was the Secretary of the first British Mathematical Colloquium held in Manchester in 1949. Walter, who is now 97, spoke about his years in St Andrews in the 1930s and 1940s.

- On 1 March, Daniel Mintz and Marit Hartveit attended the British Society for the History of Mathematics’ Research in Progress at The Queen’s College, Oxford, where Daniel gave a talk entitled, ‘The hunt for the lost cities of Ptolemy’. Both Daniel and Marit attended the British Mathematical Colloquium in York, where Daniel gave an encore of his talk, and Marit presented ‘The Edinburgh Association for the University Education of Women’. Both were given at the History of Mathematics Splinter Group.
- Ineke De Moortel attended the SDO meeting in Napa Valley (California) from 24-28 March, where she gave a talk on the automated detection of oscillations in the solar corona.
- Eric Rexstad and David Borchers flew to Sydney in mid-April to give an invited workshop on Distance Sampling methods for Cetaceans (cetaceans being whales and dolphins, for those unfamiliar with the term). The workshop was attended by cetacean researchers from all over Australia and was

very well received. An initially tight schedule for the trip was made worse by flight delays which resulted in it involving 3.5 days travelling in order to spend 3.5 days in Sydney, arriving at 6am and having to start teaching at 9am! Despite the very positive feedback from workshop participants, it is not something David or Eric are keen to do again in a hurry. David came home via Rome where he was an invited participant at a meeting to coordinate Italian cetacean survey research efforts.

- Clare Parnell visited both the east and west coasts of America at the end of March. She spent a week at a wintry University of New Hampshire where she gave a seminar, then the next week she was over in the sunny Napa Wine Valley and presented a talk and two posters at the recent SDO Planning Meeting. Clare also attended the National Astronomy Meeting at the start of April where she chaired a session and presented two posters. She also gave a seminar at MSSL, UCL in April and her two posters made a third appearance at the recent Cormack Meeting in Edinburgh!
- Peter Jupp and Caleb O’Loan attended the inaugural one-day meeting of Quantum Information Scotland at the University of Edinburgh. Caleb presented a poster.
- Rhona Maclean attended the National Astronomy Meeting, which was held in Belfast between the 31st of March and the 4th of April. She gave a presentation on “Magnetic Structuring in Bright Points and Blinkers” in the session “Magnetic Coupling in the Solar Atmosphere”.
- Stéphane Régnier gave a talk at the first SMESE meeting in Paris, an invited talk at the PNST (Sun-Earth program) in Obernai (France), a seminar at the Observatoire de Paris-Meudon, and a seminar at the Royal Observatory of Belgium (Brussels)
- Bernard Roberts attended NAM/UKSP2008 in Belfast where he convened and chaired the P31 session “Solar seismology: from the interior to the corona”. Ineke De Moortel gave one of the selected oral presentations in this session, discussing “Forward Modelling of Coronal Intensity Perturbations”. Posters in P31 were presented by Nick Owen on “Forward Modelling of Propagating Slow Waves” and David Pascoe on “MHD oscillations in flaring coronal loops”.
- Kenneth Falconer visited the University of Bath in early April to give a seminar and for research discussions with probabilists there.

- James McLaughlin attended the National Astronomy Meeting in Belfast from 31st March to 4th April and contributed a talk entitled “Nonlinear fast magnetoacoustic wave propagation in the neighbourhood of a 2D magnetic X-point”. James also wrote an article entitled “The Sun and its Effect on the Earth and on Space Travel” for the St Andrews ‘In Focus’ magazine.
- Jean Reinaud is visiting Professor Xavier Carton at the ‘Laboratoire de Physique des Océans’, Université de Bretagne Occidentale, Brest, France during 15 April-2 May. Jean and Prof. Carton are working on various aspects of oceanic vortex dynamics, in particular on vortical structures called ‘hetons’ that transport heat in the oceans. Jean gave a seminar there on ‘Destructive interactions between counter-rotating quasi-geostrophic vortices’.
- Len Thomas attended a technical meeting in April at Duke University’s Marine Laboratory in Beaufort, NC, on incorporation of acoustic survey data into a global database called OBIS-SEAMAP. Beaufort is an “historic” small town on the Atlantic coast, a quaint mix of marine scientists, tourists, sports fishermen, eccentrics dressed as pirates (Blackbeard used to live there) and, for a few days, a bemused British statistician.

MISCELLANEOUS

- Sophie Huczynska is now back from maternity leave and will be taking the rest of her fellowship on a part-time basis (until autumn 2010). She will be working in the department on Tuesday, Wednesday, Thursday and Friday mornings.

NEXT ISSUE

Please send material for the next Newsletter to: mcsupdate@mcs.st-and.ac.uk