

MATHEMATICS AND STATISTICS

NEWSLETTER

Summer 2008

CONGRATULATIONS

- Congratulations to Joanne Potts (and Martin) on the birth of their daughter, Annabelle Marie. She was born on 25th June; weight 8.4lb, length 56cm.
 - Congratulations to Ineke De Moortel (and Mark) on the birth of their son Thomas. He was born on 26th June; weight 6lbs 11oz, length 20 inches.
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WELCOMES

- Welcome to Craig Stark, who has joined the Solar Group on 2nd June. He will be working as a postdoc with Andy Wright on magnetospheric physics. Craig joins us after just completing his Ph.D. in Glasgow supervised by Declan Diver on the topic of pulsar magnetospheres. He is sharing room 307 with Rhona.
 - Welcome to all our summer students in all research groups! The summer vacation programme, for undergraduates about to start their final year, has been very successful with particularly enthusiastic students taking part this year. There are 20 students in total, spread across Pure and Applied: we wish them an enjoyable and productive summer.
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SEMINARS, LECTURES, RESEARCH VISITS

- Alex Craik was the sole St Andrews representative at the British Applied Mathematics Colloquium held in Manchester during 31st March - 3rd April. There, he chaired one of the sessions on waves. As this was the

fiftieth in the annual series of BTMC/BAMC Colloquia, a special effort was made to attract some of the “old guard”, who participated in an interesting retrospective session that examined the development of applied mathematics in Britain over this time.

- Len Thomas organized a research workshop in May on “Recent developments and future directions in spatial and habitat modelling from cetacean line transect and related data”. It was attended by a dozen visiting statisticians from the UK, Norway, Italy, France and the USA, as well as another dozen locals. Funding was provided by the US Navy and NATO, both of whom are keen to find better ways to predict where whales might be so they can minimize the impact of navy operations.
- Len Thomas hosted a visiting scientist, Mike Hammill, from the Canadian Department of Fisheries and Oceans for a week in May.
- Danielle Bewsher visited Ineke De Moortel from 6th - 8th May and give a seminar for the Solar Group. Many people will still remember Danielle: she completed her PhD with Clare Parnell a few years ago and is now a staff member at RAL.
- Magda was invited to spend two days (May 13th-14th) at the University of Bergen to discuss future collaboration and strengthen existing relations. Highlights included eating steak on top of a snow covered mountain, low-lights included carrying the steak up the mountain!
- Rhona Maclean attended the UK Magnetohydrodynamics conference, which was this year held at the University of Salford in Manchester on the 5th and 6th of June. She presented a poster entitled “Magnetic Null Points in Solar Emerging Flux”.
- The Mathematical Challenge Award Day, held in St Andrews on 11th June, was attended by over 60 prizewinners from schools across Central and Eastern Scotland. Colin Campbell presented the awards and Kenneth Falconer gave a talk entitled “Throw a Six and Win with Mathematics”. Kenneth would be very pleased to hear from anyone else who would be willing to help with marking for next year’s Mathematical Challenge. Marking a batch of scripts takes about 1 hour on 2 or 3 occasions during the year and is a good way to inspire budding mathematicians in our local community.
- Colin Campbell and Edmund Robertson attended the 5th Conference on the History of Mathematics and Teaching of Mathematics held at Tg Mures

in Romania, 3-8 June. Colin gave an invited lecture on “The Edinburgh Mathematical Society Education Committee” and Edmund, as President of the Conference, gave the opening address on “The Edinburgh Mathematical Society 1883-1933” and the closing address on “History and Mathematics”. During the closing ceremony, Edmund was presented with the “Signum Pro Scientia Absoluta Vera” award of the Erdlyi Magyar Muszaki Tudomnyos Trsasg (Hungarian Technical Sciences Society of Transylvania) “for his Contribution to the History of Mathematics”. The conference out-
ing visited Sighisoara, the town where Vlad Dracula lived. He was the ruler of Wallachia (1456-1462), and the inspiration for the Dracula legend. During the conference dinner in Sighisoara the rector of Petru Maior University in Tg Mures presented Edmund with a gift from the University.

- Len Thomas and PhD student Danielle Harris paid a short visit in June to the Cornell Laboratory of Ornithology in New York state.
- St Andrews University successfully hosted a one day meeting on Comparative Genomics on June 13, 2008. This was jointly funded by the Scottish Bioinformatics Forum and University of St Andrews. The event was attended by around 70 people and received very positive feedback from the participants. Dr. Madhu Bhattacharjee from the School co-organised the meeting and presented a talk. Dr. Bhattacharjee also acted as local organiser for the Joint St Andrews/Highlands RSS Group Meeting held in St. Andrews on May 14, 2008. See <http://www.mcs.st-andrews.ac.uk/madhu/> for some photos from both events.
- Steve Buckland, Danielle Harris, Catriona Harris, Tiago Marques and Len Thomas spent a few days in Paris in June at the annual progress meeting of a multi-national project coordinated by Len to develop methods for estimating whale density by listening for the sounds they make (see <http://www.creem.st-and.ac.uk/decaf/>). The meeting took place in the lovely Jardain des Plantes, although unfortunately there wasn't time to explore the whale exhibition in the newly refurbished museum buildings there.
- James Mitchell visited the Centre for Algebra at the University of Lisbon from 16th June - 5th July. While there, he worked with U.Darji from the University of Louisville. Subsequently, V.H.Fernandez and M.M.Rocha de Jesus, from Lisbon, visited St Andrews from 13th-19th July.

- Jean Reinaud gave an invited talk at the National Centre for Atmospheric Science (NCAS) research forum: “Next generation NCAS”. The meeting was held in Oakham and Jean talked about “The Contour-Advective Semi-Lagrangian algorithm: essentials and recent developments”.
- Jean Reinaud is visiting again Prof. Xavier Carton in Brest, France, during 17-31 July. Jean and Xavier will finish the writing of a paper on “hetons” and continue research on vortices called ”Meddies” (short for Mediterranean Eddies).
- Duncan Mackay attended a workshop at the International Space Sciences Institute, (ISSI) Bern. At the workshop he presented a talk titled “Theoretical Models of Solar Prominences”.
- Several members of the School attended the Summer School on Dynamical Systems in Goettingen. Bernd Stratmann gave a course on Fractal Geometry, Jun Miao and Tony Samuel contributed talks and Sara Munday also attended.
- Magda will be attending the SIAM Conference on Nonlinear Waves and Coherent Structures (NW08) in Rome from 21st July - 24th July where she will be presenting work on the “Breaking characteristics of highly nonlinear internal waves”.
- Ruth King has been awarded a sizeable research grant by EPSRC to work on “The Way They Move: Towards a General Framework for Understanding Animal Movement in Changing Environments”. Len Thomas is a Co-I, as is Jason Matthiopoulos (CREEM and SMRU) and several other folks from Scotland and Canada.
- The Algebra and Combinatorics group is currently hosting several visitors. Michał Morayne (Technical University of Wrocław) is visiting from 21st - 30th July, and John Truss (University of Leeds) is visiting from 21st - 25th July. Michael Albert (Dunedin) is visiting from 22nd July - 17th September.

NEXT ISSUE

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