

MATHEMATICS AND STATISTICS

NEWSLETTER

February 2001

WELCOME

- to Jean-Claude Thelen who is a new postdoc in the Solar Group. Jean-Claude has joined us from Chicago, but he in fact did his BSc here in St Andrews (1990-94). So welcome back Jean-Claude!
- to Mike Lonergan, who started work with RUWPA in January. Mike will be working primarily with David Borchers and Simon Wood on an EC-funded project to apply smoothing methods developed by Simon to estimate the biomass of Iberian Sardine and Anchovy survey data. Mike comes to us from The University of Cardiff, where he is in the process of finishing a PhD in Automated Cartography in the Department of Computer Science.
- to Dr Eliana de Andrade from Universidade Estadual Paulista, Sao Paulo, Brazil. Eliana will be here for one year as a Research Visitor, working with John McCabe. She is a colleague of Ranga and Cleonice, both of whom were doctoral students here, Ranga from 1980 to 1983 and Cleonice from 1996 to 1999. Eliana is accompanied by her husband and by the youngest of her three daughters.

CONGRATULATIONS

- to Kurt H. Falk on the successfully defended his thesis “Myrberg density for Kleinian groups, and aspects of rigidity”. Kurt has now moved to the University of Fribourg (Switzerland) to start a post-doc with Prof. R. Kellerhals.
- to Guy Warner on the successful defence of his Ph.D. thesis “A Singular Eigenfunction Problem in Plasma Physics”.

NEWS

- Over the Christmas period M. Kesseboehmer and B.O. Stratmann both visited the University of Clausthal-Zellerfeld (Germany). There they did joint research, and gave a couple of talks - M. Kesseboehmer gave a talk at the Warwick-meeting “Complex Dynamics and Ergodic Theory” (19-21 January 2001).
- Alex Craik was one of five invited speakers at a one-day meeting of the UK and Republic of Ireland section of S.I.A.M., held on 5 January at Strathclyde University. His topic was “Forced rotation of rigid and fluid bodies: an autonomous system with unbounded ‘bending’ solutions” (recently re-run in St Andrews as an Applied Mathematics seminar).
- Istvan Ballai, Klaus Galsgaard, Ineke De Moortel, Clare Parnell, Eric Priest, and Bernard Roberts all attended a one day Discussion Meeting on “Coronal Heating in the Sun and Late-Type Stars”, held recently at the Royal Astronomical Society, in London. Eric gave a review on “The theory of coronal heating”, and poster papers were presented by Istvan and R Erdelyi (on “Nonlinear theory of resonant MHD waves in twisted magnetic flux tubes”), and Ineke and A W Hood (on “The heating of coronal holes; a wavelet analysis of phase mixed Alfvén waves”). In the Ordinary Meeting of the RAS, Clare gave her Sir Norman Lockyer Fellowship lecture on “The solar magnetic carpet”.
- From the 11th-12th January Louise Burt attended a meeting in Oostende, Belgium, on monitoring the discarding and retention of fish on vessels in the North Sea. As well as discussing the sampling problems there was time to sample the Belgium delicacies of beer and chocolate.
- John Howie will be in Milan and Florence for most of February, giving lectures and pursuing some joint research with Alessandra Cherubini and Brunetto Piochi.
- Gordon Petrie has moved to Heraklion, Crete, as a Postdoc of the European Research Training Network PLATON, which is coordinated by St. Andrews. He will work with Kanaris Tsinganos at the FORTH (Foundation for Research and Technology Hellas) institute. Gordon will hopefully

visit St. Andrews frequently as the Network especially supports collaborations between the Network teams. He has already planned his first visit for the summer to take part in the University's graduation ceremonies.

- Richard Ryan attended an international workshop on “Magnetic Fields across the Hertzsprung-Russell Diagram” in Santiago de Chile between 15th-19th January. Richard presented a poster with the title “Saturation of X-ray Emission in Simple Models of Rapidly Rotating Stellar Coronae”.
- David Kemp left St Andrews at an unsocial hour on January 2nd to spend a week at NIST (the National Institute of Standards and Technology) in Gaithersburg, Maryland. David is working on the NIST Digital Library of Mathematical Functions project (DLMF). DLMF is a very major upgrade of the classic “Handbook of Mathematical Functions” by Abramowitz & Stegun, published in 1964 by the National Bureau of Standards (now NIST). The end product will be a web-accessible database of reference data associated with mathematical functions. There will also be a print version and a CD-ROM. David is co-author with Ingram Olkin (Stanford University) of the Chapter on Probability and Statistics: Functions and Distributions. Weatherwise at the time, there was not much to choose between Gaithersburg and St Andrews.

SEMINARS

- Informal Analysis Seminar (Math. Rm 1A - 3pm)
 - Friday 13th February L Olsen “Introduction into the Theory of Multifractals”

NEXT ISSUE

- Please send any material for the next newsletter to mcsnews@mcs by 12pm Thursday 8th March.