

## SCHOOL OF MATHEMATICS & STATISTICS

# NEWSLETTER

April 2001

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## CONGRATULATIONS

to Ineke de Moortel on the successful defense of her thesis entitled *Theoretical and observational aspects of wave propagation in the solar corona*. Further congratulations go to Ineke who has also been awarded a PPARC Postdoctoral Fellowship which she will start here in September.

to Oliver Buhler who has received an EPSRC grant for £66084 for a project entitled *Wave-driven vortex dynamics and longshore currents on barred beaches*.

Unfortunately, the student he had in mind for this project has decided to become a cook instead of an academic (probably because of the better pay), so he still has the task of finding a suitable candidate.

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## NEWS

Frank Smith attended the annual BAMC meeting in Reading. To make delegates feel at home there was a fire alarm during the first breakfast. Penny accompanied Frank and incredibly attended one paper - on the science of putting!!

Thomas Wiegelmann gave a talk at the University of Bochum (19.03.01) entitled *Space plasma simulation with a Vlasov code*.

He also gave two talks and a poster at the Nice EGS XXVI Assembly (25.03-30.03.01) entitled *2D Vlasov-code simulations of the evolution of magnetic helicity under kinetic reconnection*, *Reconstruction of coronal magnetic fields* and *A newly developed 2D Vlasov code for space plasma simulations*.

Peter Jupp attended the meeting on Stochastics in the Sciences which was held at Oberwolfach from 12th to 16th March. He gave a talk on *Some applications of directional statistics to astronomy*.

Kenneth Falconer recently gave a lecture *Fractals: from spirals to skylines* in the *Mathematics in Action* series in the awe-inspiring surroundings of the Royal Institution. He was also an invited speaker at the British Mathematical Colloquium in Glasgow where he spoke on *Mercerian theorems - old and new*.

Alex Craik made a brief visit to Hull University on 9-10 April, to attend the inauguration of the Hull Institute for Mathematical Sciences and Applications (HIMSA), marked by a two-day Workshop on Mathematical Fluid Dynamics. Alex gave one of the invited talks at the Workshop. The Director of the Institute is Vladimir Vladimirov, formerly of Novosibirsk and Hong Kong, and recently appointed to a chair of applied mathematics at Hull. The meeting was notable for the considerable number of Russian participants; but rumours that Kingston-upon-Hull is about to change its name to Rostov-upon-Hull are apparently ill-founded....

The Solar Group was well represented at the National Astronomy Meeting with 10 members travelling down to Cambridge for the meeting. They were Istvan Ballai, Danielle Bewsher, Daniel Brown, Cath Gerrard, Alan Hood, Chris Mellor, Thomas Neukirch, Eric Priest, Richard Ryan and Jean-Claude Thelen. The following talks were given by I. Ballai on *Ducted waves in anisotropic dilute plasmas*, D. Bewsher on *Characteristics of transition region blinkers*, D. Brown on *The rotation of sunspots and the response in the corona*, C. Gerrard on *Nonlinear kink instabilities in coronal loops* and J. Thelen on *A small-scale dynamo driven by convective turbulence*. Also several posters were given by I. Ballai on *Ducted waves in anisotropic dilute plasmas*, C. Mellor on *Exact solutions*

*for spine reconnective magnetic annihilation, T. Neukirch on Stationary MHD models of 3D rigidly rotating magnetised coronae and R. Ryan on Saturation of x-ray emission in simple modes of rapidly rotating stellar coronae.*

Alan Hood and Eric Priest each chaired a session, and Eric gave a plenary session on PPARC Astronomy.

And finally....

Every year, a Six Nations Rugby Prediction League is run in the department, where players predict the results from the Six Nations Tournament. This years tournament has just been concluded and it has been a tale of random number generators... A new sophisticated random number generator called J Mystic Maths (which weights its predictions according to previous results) was introduced. J Mystic Maths led the competition until the final week when it was pipped at the post by Keith Bennett (this years champion) - however, knowing nothing about rugby and being the ultimate computer geek, Keith requested a second running of J Mystic Maths for his predictions.

The first real human came third and (to the delight of the pure maths section) was Peter Campbell. Two people came below the traditional dumb random number generator (Mystic Maths) and collected wooden spoons. They were Shannon Brown (the only entrant from physics propping up the table), and second from bottom Steve Brooks. Better luck next year guys!

We are now trying to adapt J Mystic Maths to predict football pools and horse races...

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