# IRISH MATHEMATICAL SOCIETY <br> Cumann Matamaitice na hÉireann 

## Eighth September Meeting University of Limerick

Final Programme

The eighth September meeting of the Irish Mathematical Society will take place in Room FG-042, Foundation Building, located to the left of the Concert Hall. Registration will take place outside, as will the tea and coffee breaks. Lunches are served at the Allegro Café in the Foundation Building (adjacent to the concert hall) or in the restaurant in the main building (Block E, level M). A bus will depart from Plassey Village at 6 p.m. on Thursday for Killaloe (no fare). There will be a 90 minute cruise on Lough Derg (charge $£ 5$ ) starting at 6.30 p.m. There will be a conference banquet at Gooser's Eating House, Ballina, Killaloe at 8.30 p.m. (charge £20). The bus will return to Plassey Village after the banquet. Bed and (continental) breakfast accommodation is available at the Plassey Village, adjacent to the campus (N.B. change from Kilmurry Village) at $£ 15$ per night. House and room keys may be collected at the Village Reception which is open from 9 a.m. to 9 p.m. Breakfast will be served in the individual houses in Plassey Village between 8 a.m. and 9 a.m. each morning.

Thursday September 7th, 1995

| $\mathbf{9 . 3 0}$ | Registration |
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| $\mathbf{1 0 . 3 0}$ | Dr. E. Walsh (President, University of Limerick) <br> Welcoming address |
| $\mathbf{1 0 . 4 0}$ | Dr. D. Hurley (IMS President) <br> Opening Remarks |
| $\mathbf{1 0 . 4 5}$ | Dr. S. O'Brien (University of Limerick) <br> Industrial coating flows |
| $\mathbf{1 1 . 1 0}$ | Tea/Coffee break |
| $\mathbf{1 1 . 4 0}$ | Prof. C. Budd (University of Bath) <br> Grazing bifurcations in impact oscillators |
| $\mathbf{1 2 . 3 0}$ | Prof. M. Hayes (University College Dublin) <br> Directional ellipse method for solution of partial differential equations |
| $\mathbf{1 . 0 0}$ | Lunch |
| $\mathbf{2 . 1 5}$ | Prof. T. Laffey (University College Dublin) <br> Some combinatorial properties of matrices with nonnegative entries |
| $\mathbf{3 . 0 5}$ | Prof. D. Gries (Cornell University) <br> The consequences of teaching proof to mathematics students <br> using the calculational approach to logic |
| $\mathbf{3 . 4 5}$ | Tea/Coffee break |
| $\mathbf{4 . 1 5}$ | Dr. C.H. Chu (Goldsmith College, London) <br> Exponential functions |
| $\mathbf{5 . 0 5}$ | Close of session |

Friday September 8th, 1995

| $\mathbf{9 . 3 0}$ | Prof. John O'Donoghue (University of Limerick) <br> The mathematics of numeracy |
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| $\mathbf{1 0 . 0 0}$ | Dr. M. Mac an Airchinnigh (Trinity College Dublin) <br> Applied constructive mathematics in computing - monoids and their morphisms |
| $\mathbf{1 0 . 3 0}$ | Dr. D. Hurley (University College Cork) <br> Symmetric Attractors |
| $\mathbf{1 1 . 0 0}$ | Tea/Coffee break |
| $\mathbf{1 1 . 3 0}$ | Dr. A. Fowler (Oxford University) <br> Large scale oscillations in pleistocene ice sheets |
| $\mathbf{1 2 . 2 0}$ | Dr. M. Stynes (University College Cork) <br> Efficient solution of convection-diffusion problems using PLTMG |
| $\mathbf{1 2 . 5 0}$ | Prof. J. Miller (Trinity College Dublin) <br> Demonstration of Mathematica package for polynomial root magnitude determination |
| $\mathbf{1 . 0 0}$ | Lunch |
| $\mathbf{2 . 1 0}$ | Prof. S. Sen (Trinity College Dublin) <br> Abelian Sandpiles |
| $\mathbf{3 . 0 0}$ | Prof. A. Wickstead (Queen's University Belfast) <br> When do positive operators span the bounded ones? |
| $\mathbf{3 . 5 0}$ | Tea/Coffee break |
| $\mathbf{4 . 2 0}$ | Dr. A. Hegarty (University of Limerick) <br> Shishkin meshes for the numerical solution of convection-diffusion problems |
| $\mathbf{4 . 4 0}$ | Dr. D. Wraith (University of Notre Dame) <br> Exotic spheres with positive Ricci curvature |
| $\mathbf{5 . 1 0}$ | Prof. F. Hodnett (University of Limerick) <br> Closing remarks |

Messages while you are at the meeting may be sent to the following telephone numbers:
+353-61-202207 (UL Maths Dept. 9 a.m. to 5 p.m. only)
$+353-61-202347$ (Plassey Village - up to 9 p.m.) Fax: $+353-61-334927$ (UL Maths Dept.)
Urgent message can be sent 24 hours a day to the main university number $+353-61-333644$.

Conference organisers: Eugene Gath, Gordon Lessells, Stephen O'Brien, Department of Mathematics and Statistics, University of Limerick, Limerick, Ireland.

