

THURSDAY MORNING 3 JULY

09:00	Plenary Speaker: Yongji Tan Study Group in China (Christopher Ingold Auditorium)						
10:00	Tea/Coffee						
10:30	Minisymposia						Contributed Talks
	Christopher Ingold Auditorium <i>Optimization and Model Order Reduction in Circuit Design</i>	Christopher Ingold Chemistry L.T. <i>Numerical Simulation of Cardiac Bioelectric Activity</i>	Christopher Ingold Ramsey L.T. <i>Wetting: Fundamentals and Applications</i>	Drayton Jevons L.T. <i>Asymptotic Analysis</i>	Drayton Ricardo L.T. <i>Industrial Applied Mathematics in Ireland</i>	Harrie Massey L.T. <i>Validated Methods: Applications to Modelling, Analysis, and Design of Systems in Medicine and Engineering</i>	South Wing Garwood L.T.
10:30	E.J.W. ter Maten <i>Parameterized Model Order Reduction for nonlinear IC models</i>	A.V. Holden <i>Is geometry or dynamics more important in arrhythmogenesis?</i>	M. Yatim <i>Unsteady Rivulet Flow</i>	C.J. Chapman <i>Error diagnostics for matched asymptotic expansions</i>	C. Sweeney <i>HiWinds: High resolution forecasts for wind energy applications</i>	N. Revol <i>Introduction to Interval Arithmetic and to some Interval-Based Software Systems and Libraries</i>	J. Izquierdo <i>Distributed Particle Swarm Intelligence for optimization in the Water Industry</i>
10:50							M. Pons <i>Some Hints on Finding the Most Important Components in a System</i>
11:00	P. Barrera <i>A Netlist Reduction Algorithm to Symbolic Circuit Analysis</i>	L.F. Pavarino <i>Monophasic action potentials detect cardiac repolarization times: a Bidomain - LR1 simulation study in 3D</i>	P.D.M. Spelt <i>Shear-induced displacement of droplets from a solid substrate</i>	M.A. Porter <i>Wave propagation in granular lattices</i>	W. Lee <i>Redesigning the UK broadband network by Monte Carlo simulation</i>	A. Rauh <i>Verification Techniques for Sensitivity Analysis and Design of Controllers for Nonlinear Dynamical Systems with Uncertainties</i>	L.M.B.C. Campos <i>On Alternative Safety Metrics for the Probability of the Collision Between Aircraft</i>
11:10							
11:30	A. Venturi <i>Application of optimization and model order reduction techniques</i>	M. Sermesant <i>Fast-Models of Cardiac Electrophysiology for Diagnosis and Therapy Planning</i>	S.K. Wilson <i>Mathematical Modelling of Droplet Evaporation</i>	Y. Chen <i>Singular Linear Statistics and PIII</i>	M. Stynes <i>Mathematical modelling of heat and mass transfer processes in the treatment of polydispersed materials in fluidized beds</i>	M.A. Stadtherr <i>Validated Solution of Nonlinear Dynamic Models in Epidemiology</i>	W.L. Sweatman <i>Optimising the use of wind power in an electricity grid</i>
11:50							E. Pereira <i>An age-dependent metapopulation model</i>
12:00	L. De Tommasi <i>Optimization in surrogate model building for RF circuit blocks</i>	G. Plank <i>Largescale Numerical Solution of the Cardiac Bidomain Equations</i>	U. Thiele <i>The depinning transition of 2D and 3D driven drops on a heterogeneous substrate</i>	R. Spigler <i>Singular perturbations of parabolic equations with or without boundary layers</i>	M. Robinson <i>Wave Formation in Bubbly Flows</i>	M. Freihold <i>Derivation of Physically Motivated Constraints for Efficient Interval Simulations Applied to the Analysis of Uncertain Models of Blood Cell Dynamics</i>	J.P. Curtis <i>Simple Models of Burglary</i>
12:10							
12:30	Lunch						

THURSDAY AFTERNOON 3 JULY

14:00	Plenary Speaker: Miguel Moscoso <i>New mathematical approaches for image reconstruction in medicine and industry</i> (Christopher Ingold Auditorium)						
15:00	Tea/Coffee						
15:30	Minisymposia						Contributed Talks
	Christopher Ingold Auditorium <i>Multirate Time Integration for Multiscaled Systems</i>	Christopher Ingold Chemistry L.T. <i>Precipitation, Deposition and Sedimentation of Particles in Fluid Flow</i>	Christopher Ingold Ramsey L.T. <i>Mathematics in Agriculture and the Impact on Health</i>	Drayton Jevons L.T. <i>Asymptotic Analysis</i>	Drayton Ricardo L.T. <i>Industrial Applied Mathematics in Ireland</i>	Harrie Massey L.T. <i>Validated Methods: Applications to Modelling, Analysis, and Design of Systems in Medicine and Engineering</i>	South Wing Garwood L.T.
15:30	M. Striebel <i>Hierarchical Mixed Multirating in Circuit Simulation</i>	J.L. Castillo <i>Deposition and deposit features of inertial particles conveyed by turbulent streams</i>	N. French <i>Models for the control of human food poisoning bacteria: on-farm and food chain interventions</i>	J.S. Dehesa <i>Asymptotics of Entropic Functionals and Rydberg Physics</i>	C. de Falco <i>Patches of Finite Elements for Singularly-Perturbed Diffusion Reaction Equations with Discontinuous Coefficients</i>	T. Stark <i>Application of MOBILE for an Improved Kinematical Model Using Motion- and MRI measurements</i>	M. Kindelan <i>Radial Basis Function (RBF) solution of the Motz problem</i>
15:50							F. Bernal <i>Meshless Solutions using Strong Form Formulation of Singular Potential Flows</i>
16:00	V. Savcenco <i>Multirate numerical integration of ordinary differential equations</i>	Y. Farjoun <i>Aggregation during a Thermal Quench</i>	T. Roose <i>A mathematical modeling of plant nutrient uptake</i>	E. Pérez Sinusía <i>Asymptotic approximations for singularly perturbed convection-diffusion problems with discontinuous boundary conditions</i>	J.P.F. Charpin <i>Multi-stepping and anti-icing / de-icing devices</i>	E. Auer <i>Uses of New Sensitivity and DAE Solving Methods in SmartMOBILE for Verified Analysis of Mechanical Systems</i>	A. Toon <i>Computer Algebra as a unified Tool in Bioinformatics and Protein Structure Analysis</i>
16:30	A. Verhoeven <i>Redundancy Reduction of IC Models by Multirate Time-Integration</i>	J.C. Neu <i>Theory of surface deposition from boundary layers containing condensable vapor and particles</i>	A. Schnepf <i>Effects of mycorrhizae on nutrient uptake by agricultural crops</i>	N.M. Temme <i>The asymptotic inversion of certain cumulative distribution functions</i>	D. Mackey <i>A diffusion model for spatially dependent photopolymerisation</i>	M. Kieffer <i>Guaranteed Computation in Robotics</i>	E. Defez <i>Approximate Numerical Solutions of Non-autonomous Second-Order Matrix Models using Cubic-Matrix Splines</i>
16:50							E.B. Weinmueller <i>Global error error estimation for DAEs via modified defects</i>
17:00	A. Sandu <i>Multirate integration methods for hyperbolic PDEs</i>		G.C. Wake <i>A Distributed-Delay DE (DDDE) model for the nitrogen cycle in pasture</i>	D. Dominici <i>Asymptotic analysis of a fluid model modulated by an M/M/1 queue</i>	J. Gleeson <i>Cascade dynamics on complex networks</i>	M. Gennat <i>Validated Parameter Estimation for Static Nonlinear Systems with Applications to Micro Systems</i>	F. Sanchez-Bernabe <i>On some high order decomposition methods for differential equations via Padé approximants</i>
17:10							
17:30							
19:00	Conference Dinner (After Dinner Speaker: Lord Julian Hunt, Professor of Climate Modelling, University College London)						