

SUNDAY 1 JULY

17:00-19:00	<p>Welcome Reception and Registrations</p> <p>Hadley's Hotel, Ritz Room</p> <p>34 Murray Street, Hobart</p>
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MONDAY 2 JULY

9:00-9:30	<p>Official Opening</p> <p>Hon. David Bartlett, MHA. Minister for Education</p> <p>Professor Allan Canty, Pro Vice Chancellor (Research), University of Tasmania</p> <p>Physics Lecture Theatre 1</p>
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9:30-10:30	<p>Keynote Address 1</p> <p>Ilene Carpenter</p> <p><i>To Be Announced</i></p>
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10:30-11:10	<p>Morning Tea</p>
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	Physics Lecture Theatre 1	Physics Lecture Theatre 2	Physics Room 333
11:10-11:35	<p>Steven Barry</p> <p>Modelling climate change and Lippia Spread in the Murray-Darling system</p>	<p>P. A. Brandner</p> <p>Ideal Flow Prediction of Cavity Formation Behind a 2D Fence and Estimation of Upstream Boundary Layer Effects</p>	<p>Maria John</p> <p>A theoretical framework for the generation of consistent system performance measures</p>
11:35-12:00	<p>Roslyn Hickson</p> <p>Comparison of weed spread models along river systems</p>	<p>A. D. Henderson</p> <p>A Wavelet-Based Method for Identifying Turbulent Flow in Hot-Film Sensor Data</p>	<p>Phil Broadbridge</p> <p>Entropy Behaviour of Evolution PDEs</p>
12:00-12:25	<p>Nunung Nurhayati</p> <p>A GSTAR_(1;1) model for tea production in West-Java, Indonesia</p>	<p>Maxim V. Shamolin</p> <p>On the problem of a symmetric body motion in a resisting medium</p>	<p>Garry Newsam</p> <p>Bounding the spectra of matrices by the spectra of associated integral operators</p>

12:25-13:25	<p>Lunch</p>
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13:30-14:30	Keynote Address 2 Martyn Nash Multi-scale electro-mechanics of the heart		
14:30-14:55	Peter R. Johnston Blood flow in S-shaped in-plane and out-of-plane coronary arteries	A. Pincombe Studying flexibility in modularisable vehicle systems	Sophie Pack Block Monotone Domain Decomposition Algorithms for Singularly Perturbed Convection-Diffusion Problems
14:55-15:20	Chanchai Thajjiam The Effect of Myocardial Anisotropy on Volume Measurement Using Conductance Catheter Techniques in the Right Ventricle	Phil Broadbridge Solving a non-standard free boundary problem via canonical coordinates of an approximate scaling symmetry	M. Aslam Chaudhry Operational Representations of Fermi-Dirac and Bose-Einstein Integral Functions with Applications
15:20-16:00	Afternoon Tea		
16:00-16:25	G.N. Mercer Mathematical modelling of the effect of fire exposure on a new type of protective clothing	R Brian Webby Stochastic programming to evaluate renewable power generation for small-scale desalination	Richard Pennifold Analysing the Forced Bonhoeffer van der Pol equation using continuation methods
16:25-16:50	Geoffrey Brooks Modelling of High Temperature Processes	Majda Ceric Study of currents and sediment transport in a lake	Eddie Ly Generating Elliptic Grids in Three Dimensions by the Method of False Transients
16:50-17:15	Yan Ding The FEM Modeling of Thermal Conductivity of Fabrics Embedded with Phase Change Material	Andrew Metcalfe Trivariate copulas for characterisation of droughts	Hanif Siddique Sparse Matrix in Engineering Applications and its Implementation on a User-friendly Platform
Monday Close			

TUESDAY 3 JULY

9:00-10:00	Keynote Address 3 John Hunter Sea Level Rise: What Are We In For?		
	Physics Lecture Theatre 1	Physics Lecture Theatre 2	Physics Room 333
10:00-10:25	Ghasemi B. Computational Modelling of Natural Convection from a Heat Source Located in a Two-Cell Enclosure	J. J. Shepherd Approximating the periodic solutions of the Lotka-Volterra system.	Damien Holloway A practical algorithm for the computation of tree felling times
10:25-10:50	Suvash C. Saha Natural Convection of a Side Heated Square Cavity with a Wavy Hot Surface	A. Pincombe A heuristic approach to make air defence simulations tractable	R. Champion The nonlinear elastic properties of a helical spring
10:50-11:30	Morning Tea		
11:30-11:55	D'Arcy Mullamphy How well are we educating our mathematics students?	Jai Madhani Experimental and Numerical Characterisation of the Residence Time Distribution of a Gross Pollutant Trap (GPT)	Daniel Norrison Inviscid Flow Simulations with Approximate Factorisation Algorithm Generated Curvilinear Grids
11:55-12:20	Patrick Tobin Online Formative Tests as a Learning Tool in Engineering Mathematics	M.I. Nelson Analysis of the activated sludge model (number 1) in a membrane reactor	Mike Chen A study of nonlinear waves and resonance in intrusion flows
12:20-12:45	W. F. (Bill) Blyth Lecturer Interactive Computer Aided Assessment using Maple in a Finite Element Method course	Masaji Watanabe Modeling and analysis of biodegradation of xenobiotic polymers based on experimental results	Joe Sampson Moving Boundary Shallow Water Flow in a Region with Quadratic Bathymetry
12:45-13:45	Lunch		

13:45-14:45	Keynote Address 4 Stephen Cowley Exponentially small disturbances as a route to turbulence in unsteady fluid flows		
14:45-15:10	C.A. Gonzalez Computational study of a micro-turbine engine combustor using Large Eddy Simulation and Reynolds Averaged turbulence models	M.P. Kearney Receding horizon trajectory optimization with multiple geometric levels of detail	Prasanta K Sahoo Determination of Motion Characteristics of a Floating Body With Respect to the Variations in Degrees of Freedom: an Analytical Study
15:10-15:35	Michael P. Kirkpatrick On the stability and performance of the projection-3 method for the time integration of the Navier-Stokes equations	S. Ahmad Evaluation of Process Capability for Asymmetric Quality Characteristics Data	Hung D. Nguyen Recursive Identification of Ship Manoeuvring Dynamics and Hydrodynamics
15:35-16:15	Afternoon Tea		
16:15-16:40	N.A. Kelson CFD study of one- & two-disc MR fluid-based ergometers	A. M. O. Haruni Mathematical Model of an arc furnace for response characterisation	Abdul Rahim Khan Fixed point iteration processes for nonexpansive mapping – A unified approach
16:40-17:05	Jai Madhani Turbulence Modelling of 2D flow in a blocked Gross Pollutant Trap using CFD and experiments	Kazi Golam Sabbir Mathematical Model of Electrical Loads and Applications to Voltage Stability	Igor Boglaev Monotone iterates for solving systems of semilinear elliptic equations and applications
Tuesday Close			
17:05-17:35	EMG Meeting		
19:00	Conference Dinner Point Revolving Restaurant Wrest Point		

WEDNESDAY 4 JULY

9:00-10:00	<p align="center">Keynote Address 5</p> <p align="center">Leigh Wood</p> <p align="center">Engineering students: what do they think of mathematics and how do they think it will be used in their future?</p>		
	Physics Lecture Theatre 1	Physics Lecture Theatre 2	Physics Room 333
10:00-10:25	<p align="center">Tania Prvan</p> <p align="center">Thin film models with constant source: model selection in a stochastic setting</p>	<p align="center">M. Aktarujjman</p> <p align="center">Application of Reference Frame Theory for Controlling Doubly-Fed Induction Generator Coupled Wind Turbine</p>	<p align="center">M. Brideson</p> <p align="center">A Fourier Series Approach to Noise Reduction in MRI Coils</p>
10:25-10:50	<p align="center">Len Schwartz</p> <p align="center">Modeling and Simulation of Wetting and Spreading Phenomena for Thin Liquid Films</p>	<p align="center">Yin Chin Choo</p> <p align="center">Modelling of Hydraulic Governor-Turbine for Control Stabilisation</p>	<p align="center">S. C. Hawkins</p> <p align="center">An efficient algorithm for three-dimensional electromagnetic scattering simulation</p>
10:50-11:30	Morning Tea		
11:30-11:55	<p align="center">Vikrambhai Garaniya</p> <p align="center">Vaporization and Pyrolysis Modelling of a Single Droplet of Heavy Fuel Oil Using Continuous Thermodynamics</p>	<p align="center">Steven Barry</p> <p align="center">Predicting university performance: how diagnostic tests, school results and high school courses affect university performance.</p>	<p align="center">Maryam Esmaeili</p> <p align="center">Discount in Joint Pricing and Lot Sizing Model: A Geometric Programming Approach</p>
11:55-12:20	<p align="center">HS Sidhu</p> <p align="center">Analysing Combustion Waves in a Model with Chain Branching</p>	<p align="center">Susan Worsley</p> <p align="center">Enhancing the student experience in mathematics through the use of a group project</p>	<p align="center">L. Sandamali Dharmasena</p> <p align="center">Two-Stage Sequential Procedure for Nonparametric Regression Estimation</p>
12:20-12:45	<p align="center">HS Sidhu</p> <p align="center">Analysis of a Model for Ethanol Production through Continuous Fermentation</p>	<p align="center">Elahe Aminifar</p> <p align="center">Facilitating Transition or Support throughout Studies: A Case Study in Using Online Rich-Media to Develop Engineering Mathematics Skills</p>	<p align="center">G.N. Mercer</p> <p align="center">The effect of classification range and aircraft dynamics on a simplified maritime surveillance scenario</p>
12:45-13:45	Lunch		

13:45-14:00	Information Session: Conference Article Preparation ANZIAM Journal Editor		
14:00-14:25	Irene Penesis Entry Effects in the Narrow Gas-Lubricated Slider Bearing	Poh Tiew Hu Mathematical representation of thermal rating for power transmission lines	Peter While Designing RF Phased Array Coils for MRI Equipment
14:25-14:50	J. C. Bennett Temperature effects in the Blown Newtonian Film.	Elizabeth Harrison The Development of Control Systems for Underwater Vehicles	L.K. Forbes Calculating the Movement of MRI Coils, and Minimizing their Noise
Conference Close			