	TUESDAY JUNE 14th						
TIME	**ACTIVITY**						
7:30 AM	Breakfast						
	ART lobby						
8:00 AM	Plenary						
	ART 103						
	Gail Wolkowicz						
	A derivation Procedure for Multi-Species Discrete Population Models and Analysis of Planar Models: Introducing the Augmented Phase-Plane						
9:00 AM	Coffee Break						
	ART lobby						
	MS Sessions D						
	ART 102	*ART 104*	*ART 108*	*ART 110*	*ART 112*	*ART 114*	*ART 103*
	MS09: Bifurcations & dynamics in biological systems (part IV)	MS32: Computational mathematics (part I)		MS05: Applications of continuous optimization	MS07:Asymptotic analysis arising in reaction-diffusion systems (part II)	MS08: Batteries: Modeling, simulation, & analysis (part I)	MS22-V: Recent advances on numerical methods for Helmholtz equations
9:30 AM	Chunhua Shan	Xiyuan Li		Henry Wolkowicz	Theo Kolokolnikov	Smita Sahu	Krishna Dutt
	High codimension bifurcations of a predator-prey system with generalized Holling type functional response and Allee effects in prey	*A Joint Chirp-Rate-Time-Frequency Transform (JCTFT) for Non-templated BBH Merger Gravitational-Wave Signal Detection Using Spectrograms*		*Strict Feasibility and Degeneracy in Linear Programming*	*Stabilization of stripe patterns*	*A continuum model for both reversible and irreversible lithium plating in lithium-ion batteries*	*High-order moment limiter for the DG method on quadrilateral meshes* *Programming with Fields*
9:55 AM	Ankai Liu	Cristina Anton		Alexander Iannantuono	Justin Tzou	Robert Timms	Bin Han
	A Quantification of Long Transient Dynamics	*Application of Malliavin calculus to error analysis of implicit numerical schemes for SDEs*		*A Regularization Approach to Smooth Vertical Alignments in Road Design*	*TBA*	*Asymptotic reduction of a mechanical model for jelly roll collapse and damage*	*Dirac Assisted Tree (DAT) method for Helmholtz equations with large wavenumbers*
10:20 AM	Sabrina Heike Streipert	Melusi Khumalo		Dominique Monnet	Arvin Vaziry	Andres Galvis	Michelle Michelle
	Method to Derive Discrete Population Models and their Continuous Counterparts	*The Finite Element Method for nonlinear Fredholm integral equation of the second kind*		*Quadratic regularization algorithm: convergence analysis with finite precision computations*	*Modelling of spatial infection spread through heterogeneous population: from lattice to PDE models*	*Multiple scales homogenisation of the mechanical behaviour of Li-ion batteries*	*Sharp Stability Results and Sixth Order Compact Finite Difference Scheme for the 2D Helmholtz Equation*
10:45 AM	Lin Wang	Ivonne Medina Lo		Yves Lucet	Maryam Basiri	Bartosz Protas	Wenyuan Liao
	Turing-Hopf bifurcation and its normal form in a diffusive three-species food chain system with strong Allee effect	*GPU computing of yield stress fluid flows in narrow gaps*		*A convex optimization model for the vertical alignment problem in road design*	*Traveling Wave Solutions for a Free Boundary Problem Modeling Spread of Ecosystem Engineers*	*Learning optimal forms of the constitutive relations characterizing ion intercalation from data*	*A Compact High Order Finite Difference Method for Helmholtz Equation*
11:10 AM	Prize Talk						
	CAIMS/SCMAI Research Prize						
	ART 103						
	Elina Robeva						
	Orthogonal and Equiangular Tensor Decomposition						

11:55 AM	Lunch						
	Sun Room						
12:30 PM	AGM						
	Sun Room						
	MS SESSIONS E						
	ART 102	*ART 104*	*ART 108*	*ART 110*	*ART 112*	*ART 114*	
	MS09: Bifurcations & dynamics in biological systems (part V)		MS03: Advances in splitting methods for time integration	MS26: Stochastic optimization models in pricing & supply chains	MS04: Advances in the efficient numerical solution of PDEs (part I)	MS08: Batteries: Modelling, simulation, & analysis (part II)	
13:30 PM	Xiaoying Wang		Siqi Wei	Sinem Kinay	Maya Neytcheva	Ferran Brosa Planella	
	Studying the fear effect in a one-predator-two-prey system		*An intuitive representation and linear stability analysis of Fractional-Step Runge--Kutta methods*	*Decentralized Online Order Fulfillment in Omni-Channel Retailers*	*Yet another(?) stage-parallel preconditioner for Implicit Runge-Kutta methods*	*Asymptotic reduction of battery degradation models (SEI growth and lithium plating)*	
13:55 PM	Sarah Wyse		Arash Sharshar	Merve Bodur	Steven Ruuth	Laura Keane	
	Decreasing structural sensitivity in the functional responses of predator-prey models		*On time-stepping methods for gradient-flow optimization*	*Stochastic Dynamic Lot Sizing with Substitution and Service Level Constraints*	*Schwarz Domain Decomposition Algorithms for the Closest Point Method on Closed Manifolds*	*Reduction of a lithium-ion solid electrolyte model under potentiostatic hold*	
14:20 PM	Pijush Panday		Peter Minev	Mucahit Cevik	Benjamin W. Ong	Doireann O'Kiely	
	Dynamics of a stage-structured predator-prey model incorporating cost and benefit of fear-induced group defense		*Splitting schemes for incompressible fluid-structure interaction problems in a stress formulation*	*Approximate Dynamic Programming for Crowd-shipping with In-store Customers*	*Iterative Rank-Revealing Randomized Algorithms*	*Mechanical stress and chemical transport in nanowire batteries*	
14:45 PM	Excursion						
	** Okanagan Wine Tour* ** Kettle Valley Railway bike tour* ** Explore downtown* ** Hike on Knox Mountain* ** Or simply relax and visit!*						
21:45 PM							