

**Workshop on Applied and Computational Mathematics with
Interdisciplinary Applications
Day 1, 10 April 2026, Friday**

Time		Venue
08:20 – 08:30	Registration opens	HKIAS Lecture Theatre
Chair: Prof. Roderick S. C. Wong		
08:30 – 09:10	The Phi-Max-Mean Algorithm and Its Theoretical-Practical Basis in Nonlinear Expectation Framework <i>Prof. Shige Peng, Shandong University, China</i>	HKIAS Lecture Theatre
09:10 – 09:50	Efficient structure preserving schemes for a class of kinetic equations <i>Prof. Jie Shen, Eastern Institute of Technology, China</i>	HKIAS Lecture Theatre
09:50 – 10:10	Coffee Break	
10:10 – 10:50	Computing Ricci flow and isometric embedding of Riemannian manifolds <i>Prof. Buyang Li, The Hong Kong Polytechnic University, Hong Kong</i>	HKIAS Lecture Theatre
10:50 – 11:30	TBA <i>Prof. Dong Li, The University of Hong Kong, Hong Kong</i>	HKIAS Lecture Theatre
11:30 – 12:10	Solution of the scalar Riccati equation <i>Prof. Peter Gibson, York University, Canada</i>	HKIAS Lecture Theatre
12:10 – 14:00	Workshop Lunch	City Chinese Restaurant
Chair: Prof. Huaxiong Huang		
14:00 – 14:40	Energetic Variational Approaches: Dissipation and Dispersion <i>Prof. Chun Liu, Illinois Institute of Technology, USA</i>	HKIAS Lecture Theatre
14:40 – 15:20	Adaptive feature capture method for solving partial differential equations with near singular solutions <i>Prof. Xiao-Ping Wang, The Chinese University of Hong Kong, Shenzhen, China</i>	HKIAS Lecture Theatre
15:20 – 15:40	Coffee Break	
15:40 – 16:20	Sampling Strategies for PINNs: From Local Adaptation to Global-Local Fusion <i>Prof. Jiaqi Luo, Soochow University, China</i>	HKIAS Lecture Theatre
16:20 – 17:00	Stability analysis and nonlinear dynamics for liquid thread in presence of surfactant: the effect of surface viscosity and electric field <i>Prof. Dongdong He, The Chinese University of Hong Kong, Shenzhen, China</i>	HKIAS Lecture Theatre
17:00 – 17:40	Drawing of weakly viscoelastic fluid tubes <i>Prof. Diandian Gu, Shenzhen University, China</i>	HKIAS Lecture Theatre

**Workshop on Applied and Computational Mathematics with
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Day 2, 11 April 2026, Saturday**

Time		Venue
Chair: Prof. Shige Peng		
08:30 – 09:10	Concentration inequalities, exponential convergence and tamed Euler-Maruyama scheme for mean-field interacting particle system and McKean Vlasov equations <i>Prof. Wei Liu, Wuhan University, China</i>	HKIAS Lecture Theatre
09:10 – 09:50	Knowledge Distillation with Adaptive Influence Weight <i>Prof. Yuhui Deng, Beijing Normal-Hong Kong Baptist University, China</i>	HKIAS Lecture Theatre
09:50 – 10:10	Coffee Break	
10:10 – 10:50	Loss-based priors for BART models <i>Prof. Cristiano Villa, Duke Kunshan University, China</i>	HKIAS Lecture Theatre
10:50 – 11:30	Learning in Representation Spaces of Hyperbolic Neural Networks <i>Prof. Dongmian Zou, Duke Kunshan University, China</i>	HKIAS Lecture Theatre
11:30 – 12:10	A median-filter-based framework for interface optimal design problems <i>Prof. Dong Wang, The Chinese University of Hong Kong, Shenzhen, China</i>	HKIAS Lecture Theatre
12:10 – 14:00	Workshop Lunch	City Chinese Restaurant
Chair: Prof. Dan Dai		
14:00 – 14:40	Recent progress on Saran and Humbert functions: asymptotics and beyond <i>Prof. Minjie Luo, Donghua University, China</i>	HKIAS Lecture Theatre
14:40 – 15:20	Shapiro's conjecture for exponential sums with only real zeros <i>Prof. Zhitao Wen, Shantou University, China</i>	HKIAS Lecture Theatre
15:20 – 15:40	Coffee Break	
15:40 – 16:20	Exact Resurgence Formulae <i>Prof. Gergő Nemes, Harbin Institute of Technology, China</i>	HKIAS Lecture Theatre
16:20 – 17:00	The Arrow-Hurwicz-Uzawa Method: Historical Perspectives and Current Advances <i>Prof. Xiaoming Yuan, The University of Hong Kong, Hong Kong</i>	HKIAS Lecture Theatre
17:00 – 17:40	Mixing flow and advection-diffusion equations <i>Prof. Xiaoqian Xu, Duke Kunshan University, China</i>	HKIAS Lecture Theatre
18:30 – 20:30	Workshop Banquet	City Chinese Restaurant

**Workshop on Applied and Computational Mathematics with
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Day 3, 12 April 2026, Sunday**

Time		Venue
Chair: Prof. Zhen Zhang		
08:30 – 09:10	On Lattice Minimization Problems <i>Prof. Juncheng Wei, The Chinese University of Hong Kong, Hong Kong</i>	HKIAS Lecture Theatre
09:10 – 09:50	Non-uniform approximations for strongly coupled multi-physics systems <i>Prof. Weiwei Sun, Beijing Normal-Hong Kong Baptist University, China</i>	HKIAS Lecture Theatre
09:50 – 10:10	Coffee Break	
10:10 – 10:50	A dynamic model for cross-country skiing <i>Prof. John Stockie, Simon Fraser University, Canada</i>	HKIAS Lecture Theatre
10:50 – 11:30	Variational Modeling and Numerical Simulations for Evaporating Thin Droplets and Coffee-Ring Effect <i>Prof. Tiezheng Qian, Hong Kong University of Science and Technology, Hong Kong</i>	HKIAS Lecture Theatre
11:30 – 12:10	Embedded Pairs with Long-Time Stability: Variable-Step ETD Methods for 2D Forced Navier–Stokes <i>Prof. Xiaoming Wang, Eastern Institute of Technology, China</i>	HKIAS Lecture Theatre
12:10 – 14:00	Workshop Lunch	City Chinese Restaurant
Chair: Prof. Juncheng Wei		
14:00 – 14:40	Stochastic Approximation MM Algorithms for Multiple Responses Mixed-effects Model and its Application to Blood Pressure Measurement <i>Prof. Zhenghui Feng, Harbin Institute of Technology, Shenzhen, China</i>	HKIAS Lecture Theatre
14:40 – 15:20	Phase-field modeling and thin-film dynamics of surface diffusions problems <i>Prof. Zhen Zhang, Southern University of Science and Technology, China</i>	HKIAS Lecture Theatre
14:20 – 16:00	Mathematical modeling, analysis and numerical investigation of ion active transport with free boundaries <i>Prof. Yuzhe Qin, Shanxi University, China</i>	HKIAS Lecture Theatre
16:00 – 16:10	Closing Comments	