

Workshop on Computational Mathematics

Dec 9-12, 2017

Department of Applied Mathematics,
The Hong Kong Polytechnic University, Hong Kong

Sponsors:

AMSS-PolyU Joint Research Institute
Hong Kong Mathematical Society
Department of Applied Mathematics, PolyU

Enquiry:

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Campus Map

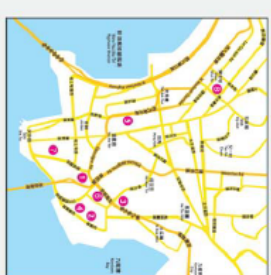
校園地圖

THE HONG KONG
POLYTECHNIC UNIVERSITY
香港理工大學

KEY TO CAMPUS MAP 校園索引

	車庫		洗衣機
	導盲人士手筒		廁所
	翼		適合殘疾人士的廁所
	車		樓梯 / 自動樓梯
	大樓		書院 / 文庫
	大學校車總站		餐廳 / 咖啡室
	大學醫療健康處		商店
	健康服務		咖啡館
	急救站		便利店
	崗亭		商店

Location Map of Off-Campus Venues 校外地點位置圖



1. Poly Music Centre 音樂中心
2. Student & Staff Residence (Hong Kong) 香港理工大學學生宿舍
3. Student & Staff Residence (Macau) 澳門理工大學學生宿舍
4. Anytime Learning Centre 任何時間學習中心
5. Poly Learning Centre 香港理工大學學習中心
6. Poly Learning Centre 香港理工大學學習中心
7. Poly Learning Centre 香港理工大學學習中心
8. Off-Campus Learning (OCL) - Island Road 離島道校外學習中心
9. Off-Campus Learning (OCL) - Shatin Road 沙田道校外學習中心
10. Off-Campus Learning (OCL) - Yuen Long Road 元朗道校外學習中心



Saturday, 9 Dec 2017

08:30	Registration	Y304
08:50-09:00	Opening Ceremony Group Photo	Y304
09:00-10:30	Session 1 09:00 Arieh Iserles <i>Tridiagonal, skew-Hermitian differentiation matrices</i> 09:30 Yunqing Huang <i>Time-domain metamaterial models and finite element simulations</i> 10:00 Qi Wang <i>Computational modeling of active particle systems on surfaces</i>	Y304
10:30-10:50	Coffee Break	Y304
10:50-12:20	Session 2 10:50 Jie Shen <i>An efficient numerical method for time fractional diffusion equations</i> 11:20 Zhimin Zhang <i>Superconvergence points in finite element methods for elliptic problems</i> 11:50 Huazhong Tang <i>Second-order accurate genuine BGK schemes for the ultra-relativistic flow simulations</i>	Y304
12:30-14:30	Lunch	
14:30-16:00	Session 3 14:30 Chuanju Xu <i>Fractional Phase-Field Models for Two-Phase Flows: Efficient Algorithms and Simulations</i> 15:00 Weiqing Ren <i>Distinguished limits of a Navier-Slip model for the moving contact line problem</i> 15:30 Tiejun Li <i>TBA</i>	Y304
16:20-17:50	Session 4 16:20 Ping Lin <i>A posteriori error estimators for an atomistic-to-continuum coupling system</i> 16:50 Haijun Wu <i>Polynomial preserving gradient recovery of linear FEM for Helmholtz equation with high wave number</i> 17:20 Lei Zhang <i>Phase field modeling of Cell Polarity and Cell Delamination</i>	Y304
18:00-20:30	Banquet	

Sunday, 10 Dec 2017

09:00-10:30	Session 1 09:00 Qiang Du <i>Stability of nonlocal Dirichlet integrals and its implications</i> 09:30 Jialin Hong <i>TBA</i> 10:00 Xuejun Xu <i>A New Robin-type Domain Decomposition Method</i>	Y304
10:30-10:50	Coffee Break	Y304
10:50-12:20	Session 2 10:50 Weizhu Bao <i>Modeling and Simulation for Solid-State Dewetting Problems</i> 11:20 Yang Xiang <i>Energy and Dynamics of Grain Boundaries Based on the Underlying Microstructure</i> 11:50 Hui Zhang <i>Story on the Ericksen-Leslie system of liquid crystal with and without the penalty function</i>	Y304
12:30-14:30	Lunch	
14:30-16:00	Session 3 14:30 Dongming Wei <i>Modelling and Simulation of Nonlinear Material Structures for Mechanical Pressure Sensing and Actuation Applications</i> 15:00 Jun Hu <i>Asymptotically exact a posteriori error estimators for eigenvalues of nonconforming elements and enhancing algorithms</i> 15:30 Liwei Xu <i>Regularization of hyper-singular boundary integral operators of elastic waves</i>	Y304
16:00-16:20	Coffee Break	Y304
16:20-17:50	Session 4 16:20 Lili Ju <i>Overlapping Localized Exponential Time Differencing Methods for Diffusion Problems</i> 16:50 Weiguo Gao <i>TBA</i> 17:20 Weiyang Zheng <i>Perfectly matched layer method for scattering problems in layered media</i>	Y304
18:00-20:30	Dinner	

Monday, 11 Dec 2017

09:00-10:30	Free Discussion	
11:00-12:00	Distinguished Lecture Pingwen Zhang <i>The Essence of Applied Mathematics</i>	Y301
12:00-14:30	Lunch	
14:30-16:00	Session 1 14:30 Qingsong Zou TBA 15:00 Chunxiong Zheng <i>Optimal error estimates for first-order Gaussian beam approximations to the Schrodinger</i> 15:30 Minghui Song TBA	Y301
16:00-16:20	Coffee Break	Y301
16:20-17:50	Session 2 16:20 Shuyu Sun <i>Robust iterative algorithms for stability analysis and flash calculation of Peng-Robinson fluids at constant moles, volume and temperature</i> 16:50 Chengjian Zhang <i>Generalized Störmer–Cowell Methods for Nonlinear BVPs of Second-Order Delay-Integro-Differential Equations</i> 17:20 Jiang Yang <i>A new class of efficient and robust energy stable schemes for gradient flows</i>	Y301
18:00-20:30	Dinner	

Tuesday, 12 Dec 2017

09:00-10:30	Session 1 09:00 Yanping Chen TBA 09:30 Tao Cui <i>PHG: A framework for parallel adaptive finite element method and its applications</i> 10:00 Shipeng Mao <i>Adaptive finite element method for incompressible magnetohydrodynamics</i>	Y301
10:30-10:50	Coffee Break	Y301
10:50-12:20	Session 2 10:50 Xiaofei Guan TBA 11:20 Zhihui Liu TBA 11:50 Xiao Li <i>Numerical analysis of exponential time differencing schemes for nonlocal Allen-Cahn equations</i>	Y301
12:30-14:30	Lunch	
14:30-15:30	Session 3 14:30 Jun Li TBA 15:00 Xuguang Yang <i>Thermodynamic-consistent multiple-relaxation-time lattice Boltzmann equation model for nonideal fluids with Peng-Robinson equation of state</i>	Y301
16:30-17:30	Distinguished Lecture Susanne Brenner <i>C^0 interior Penalty Methods</i>	Y303
18:00-20:30	Dinner	