

4. Schedule Overview

Schedule for High Performance Numerical Algorithms and Applications, January 8- 12, 2018								
Time	01/08 (Monday)		01/09 (Tuesday)		01/10 (Wednesday)	01/11 (Thursday)	01/12 (Friday)	
08:50-09:00	Opening		No event					
09:00-09:45	Section Chair: Xiao-Chuan Cai	Lin-Bo Zhang ichannel: a Toolbox for Parallel Adaptive Finite Element Solution of 3D Poisson-Nernst-Planck Equations	Section Chair: Chao Yang	Rong Tian High Performance and High Resolution Simulation on Complex Engineering Problems	Section Chair: Zhonghua Lu	Chao Yang Solving a System with Trillion Unknowns per Second with HPGMG on Sunway TaihuLight	Section Chair: Rongliang Chen	Feng-Nan Hwang A Multiscale Finite Element Method with Adaptive Bubble Function Enhancement
09:45-10:30		Jian Zhang Compact Exponential Time Differencing Methods for Phase Field Equations		Tao Cui PHG: A Framework for Parallel Adaptive Finite Element Method and its Applications		Xin Liu The Characteristic Analysis and Exascale Suggestions of Large Scale Parallel Applications on Sunway TaihuLight Supercomputer		Xuchuan Lin Automatic Modeling and Scalable Parallel Computing for Simulating the Seismic Responses of Buildings at City Scale
10:30-10:45		Coffee Break		Coffee Break		Coffee Break		Coffee Break
10:45-11:30		Kengo Nakajima Application Development Framework for Manycore Architectures - from Exascale to Post Moore Era		Haijian Yang An Eulerian Variational Inequality Framework for Transport Problems on the Sphere		Xiaowen Xu AutoMG: An Automatic Tuning Multigrid Framework for the Sequences of Sparse Linear Systems		Leszek Marcinkowski Adaptive Overlapping Schwarz Method for Multiscale Problems in 3D
11:30-12:15		Xiaomao Deng Parallel Domain Decomposition Method for Inverse Parameter Identification Problems		Lulu Liu Adaptive Nonlinear Preconditioning Techniques		Wen-Shin Shiu Parallel Monolithic Algorithm for Simulation of Patient-Specific Coronary Artery		Zhengzheng Yan A Domain Decomposition Based Method for the Simulation of Wind Flows Over Large Urban Areas
12:15-14:00	Lunch Break							

14:00-14:45	Section Chair: Kengo Nakajima	Yang Xiang Modeling and Simulation of Dislocation Climb	Section Chair: Li Luo	Zhen Zhang Modeling and Simulation of Moving Contact Line Problem for Two-phase Complex Fluids Flow	Free Discussion (13:30-17:00)	Section Chair: Yang Xiang	Xiao-Ping Wang TBD	Departure
14:45-15:30		Yibao Li Efficient and Stable Compact Fourth-order Finite Difference Schemes for Phase Field Model		Jie Chen Adaptive Mixed-Hybrid and Penalty Discontinuous Galerkin Method for Two-Phase Flow in Heterogeneous Media			Fei Wang Adaptive Discontinuous Galerkin Methods for an Incompressible NS Problem with a Nonlinear Slip Boundary Condition of Frictional Type	
15:30-16:00		Yafan Yang Optimizing the Performance of Molecular Dynamics Simulation of Water, Carbon Dioxide and Decane		Haohan Li Weighted Nonlocal Total Variation in Image Processing			Tianpeng Jiang A Perturbation Model for Optical Modes in Deformed Disk	
16:00-16:30		Coffee Break		Coffee Break			Coffee Break	
16:30-17:15		Jizu Huang A Lattice Boltzmann Model for Multiphase Flows with Moving Contact Line and Variable Density		Xiang Li Energy Decaying Phase-field Model for Fluid-particle Interaction in Two-phase Flow			Shishun Li Multilevel Space-time Additive and Multiplicative Schwarz Methods for Solving Parabolic Equations	
17:15-18:00		Huangxin Chen Modeling and Simulation of Flow in Fractured Porous Media: Adaptation and its Application		Chaozhen Wei Epitaxial Growth and Shape Transitions of Strained Quantum Dots			Shihua Gong A Nonlinear Elimination Preconditioned Inexact Newton Method for Heterogeneous Hyperelasticity	
18:00-19:30	Dinner							