

CSE19 Poster Board Assignments

Alphabetical by Presenter

Author List <i>(italics indicates presenter)</i>	Poster #	Day	Session	Title
<i>Joshua R. Abrams</i> , University of Arizona, U.S.; José Celaya-Alcalá, Brown University, U.S.	205	Wednesday	PP204	Minisymposium: Analysis of Equity Markets - A Graph Theory Approach
<i>Scott Aiton</i> , Donna Calhoun, and Grady B. Wright, Boise State University, U.S.	197	Wednesday	PP202	Minisymposium: A Massively Parallel Solver for Poisson's Equation on Block Structured Cartesian Grids
<i>Nissrine Akkari</i> , Fabien Casenave, and Christian Rey, SAFRAN, France; Vincent R. Moureau, CORIA, France	1	Tuesday	PP1	Design Exploration of Fuel Injectors Based on Reduced Order Modeling
<i>Said Algarni</i> , King Fahd University of Petroleum and Minerals, Saudi Arabia	2	Wednesday	PP2	Pad'e Time Stepping Method of Rational Form for Reaction Diffusion Equations
<i>Jeffery M. Allen</i> , Justin Chang, Francois Usseglio-Viretta, and Peter Graf, National Renewable Energy Laboratory, U.S.	3	Tuesday	PP1	Parallel Implementation of a Monolithic Li-ion Battery Model using Fenics
<i>Matea Alvarado</i> , University of California, Merced, U.S.; Johannes P. Blaschke, Lawrence Berkeley National Laboratory, U.S.	189	Wednesday	PP201	Minisymposium: Modeling the Chemistry and Hydrodynamics of Micro-swimmers
<i>Mercy Amankway</i> , Montana State University	136	Tuesday	PP102	Minisymposium: Modelling In-crib Drying of eAr Maize- A Case Study of Sunyani-West District
<i>Ilon Ambartsumyan</i> , Tan Bui-Thanh, Omar Ghattas, and Eldar Khattatov, University of Texas at Austin, U.S.	4	Tuesday	PP1	An Edge-preserving Method for Joint Bayesian Inversion with Non-Gaussian Priors
<i>Anton G. Artemov</i> , Uppsala University, Sweden	5	Wednesday	PP2	Sparse Approximate Matrix Multiplication in a Fully Recursive Distributed Task-based Parallel Framework
<i>Ibrahim H. Aslan</i> and Suzanne Lenhart, University of Tennessee, Knoxville, U.S.	206	Wednesday	PP204	Minisymposium: A Mathematical Model for Cost-Effectiveness Analysis and Early Detection of Leptospirosis in Humans
<i>Davoud Ataee Tarzanagh</i> and George Michailidis, University of Florida, U.S.	6	Wednesday	PP2	A Double Core Tensor Factorization for Heterogeneous Data
<i>Andrew T. Azzam</i> , Benjamin W. Ong, and Allan Struthers, Michigan Technological University, U.S.	7	Wednesday	PP2	Randomized Sub-sampled Methods for Matrix Approximation
<i>Olalekan Babaniyi</i> , University of California, Merced, U.S.; Omar Ghattas, University of Texas at Austin, U.S.; Noemi Petra, University of California, Merced, U.S.; Umberto Villa, Washington University, St. Louis, U.S.	161	Tuesday	PP103	Minisymposium: hIPPYlib: An Extensible Software Framework for Large-scale Inverse Problems
<i>Alexandra Ballow</i> , Youngstown State University, U.S.	131	Tuesday	PP102	Minisymposium: Joint Sequence Analysis Challenges: How to Handle Missing Values and Mixed Variable Types
<i>Cody J. Balos</i> and David J. Gardner, Lawrence Livermore National Laboratory, U.S.; Daniel R. Reynolds, Southern Methodist University, U.S.; Carol S. Woodward and Slaven Peles, Lawrence Livermore National Laboratory, U.S.; Alan Hindmarsh, Lawrence Berkeley National Laboratory, U.S.	162	Tuesday	PP103	Minisymposium: Shaping a Sustainable SUNDIALS: Applying Software Sustainability Practices to a CSE Library
<i>Chittrak Banerjee</i> , Michigan State University, U.S.	132	Tuesday	PP102	Minisymposium: Deployment of Automatic Differentiation Package in R
<i>Masoud Behzadinasab</i> and John Foster, University of Texas at Austin, U.S.	8	Wednesday	PP2	A Stabilized, Hypoelastic Constitutive Correspondence Framework for Peridynamics
<i>David E. Bernholdt</i> , Oak Ridge National Laboratory, U.S.	163	Tuesday	PP103	Minisymposium: Outreach for Better Scientific Software
<i>Toheeb A. Biala</i> and Abdul Khaliq, Middle Tennessee State University, U.S.	9	Wednesday	PP2	Anomalous Sub- and Super-diffusion in Image Processing
<i>Matthias Bolten</i> , University of Wuppertal, Germany	10	Wednesday	PP2	Blocked Multigrid Methods for Structured Matrices
Gregory S. Bolet and <i>Joshua Booth</i> , Franklin & Marshall College, U.S.	11	Tuesday	PP1	Feasibility Study of Multilevel Schur Complement Methods for Sparse Linear Systems
<i>Stuart Bowman</i> , MITRE Corporation, U.S.	164	Tuesday	PP103	Minisymposium: Using Software Best Practices to Advance Research Across the Aviation Industry
<i>Benjamin B. Buckner</i> and Jeff Banks, Rensselaer Polytechnic Institute, U.S.; T Hagstrom and K Juhnke, Southern Methodist University, U.S.	12	Tuesday	PP1	Discontinuous-Galerkin Galerkin-differences for the Wave Equation in Second-order Form
<i>Jon Calhoun</i> , Tasmia Reza, and Pavlo Triantafyllides, Clemson University, U.S.	13	Wednesday	PP2	Exploring the Variability and Error Distributions of Lossy Compression Algorithms

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Sean P. Carney , The University of Texas at Austin, U.S.; John B. Bell and Andy J. Nonaka, Lawrence Berkeley National Laboratory, U.S.; Alejandro Garcia, San Jose State University, U.S.	190	Wednesday	PP201	Minisymposium: Modeling Electro-kinetic Flows with Fluctuating Hydrodynamics
Zhen-Guo Yan, Yu Pan, Joaquim Peiro, Spencer Sherwin, and Giacomo Castiglioni , Imperial College London, United Kingdom	14	Wednesday	PP2	Development of Efficient Preconditioners for Newton-Krylov Method in Spectral/hp Element, DG Compressible Flow Simulations
Miguel A. Castro , Inter-American University of Puerto Rico, Bayamón Campus, P.R.; Betul Pamuk and Darrell Schlom, Cornell University, U.S.	15	Wednesday	PP2	Understanding the Structure of Germanium Sulfide (GeS)
Justin Chang , Gord Stephen, and Dheepak Krishnamurthy, National Renewable Energy Laboratory, U.S.	16	Wednesday	PP2	A Scalable Petsc Implementation of the 3-Phase Unbalanced Ac Power Flow Solver
Jocelyn Chi and Ilse Ipsen, North Carolina State University, U.S.	119	Tuesday	PP101	Minisymposium: Randomized Least Squares Regression: Combining Model and Algorithm-induced Uncertainties
Gary Choi and Chris H. Rycroft, Harvard University, U.S.	17	Wednesday	PP2	Density-equalizing Reference Map with Applications
Abhishek Choudhary and Peter R. Kramer, Rensselaer Polytechnic Institute, U.S.	207	Wednesday	PP204	Minisymposium: Stochastic Modeling of Neuronal Transport in Various Cellular Geometries
Seung Whan Chung , University of Illinois at Urbana-Champaign, U.S.; Stephen D. Bond and Eric C. Cyr, Sandia National Laboratories, U.S.; Jonathan B. Freund, University of Illinois at Urbana-Champaign, U.S.	18	Wednesday	PP2	Sensitivity Analysis in Particle-in-Cell Methods
Hartwig Anzt, University of Tennessee, U.S.; Goran Flegar, Universitat Jaume I, Spain; Terry Cojean and Pratik Nayak, Karlsruhe Institute of Technology, Germany; Enrique Quintana-Orti, Universidad Jaume I, Spain	165	Tuesday	PP103	Minisymposium: Ginkgo: Designing a Single-Node Linear Operator Framework for High Performance Computing
Jeffrey Cornelis , University of Antwerp, Belgium; Pieter Ghysels, Lawrence Berkeley National Laboratory, U.S.; Siegfried Cools and Wim Vanroose, University of Antwerp, Belgium	19	Wednesday	PP2	Pipelined Krylov Subspace Methods with Improved Parallel Scalability
Peter Coveney , University College London, United Kingdom	20	Wednesday	PP2	On the less than Reasonable Effectiveness of Floating Point Arithmetic in the Modelling of Physical Systems: the Case of the Generalised Bernoulli Map
Julian Cuevas , Lawrence Berkeley National Laboratory, U.S. and University of Puerto Rico at Mayaguez, P.R.	133	Tuesday	PP102	Minisymposium: Capsule Networks for Protein Structure Classification and Prediction
Allan J. Da Silva and Jack Baczynski, National Laboratory for Scientific Computing, Brazil; José Vicente, BCB/IBMEC, Brazil	21	Wednesday	PP2	Exponential Affine Solutions for Correlated Stochastic Process
Ruxin Dai , University of Wisconsin-River Falls, U.S.	22	Wednesday	PP2	An EXCMG Accelerated Multiscale Multigrid Computation for 3D Poisson Equation
Valentin Dallerit , University of California, Merced, U.S.; John Loffeld, Lawrence Livermore National Laboratory, U.S.	23	Tuesday	PP1	Towards the Understanding of Multirate Schemes on Adaptive Mesh Refinement Grids
Eduardo F. D'Azevedo , Wael R. Elwasif, Arghya Chatterjee, and Gonzalo Alvarez, Oak Ridge National Laboratory, U.S.	24	Tuesday	PP1	A Kronecker Product Implementation of Density Matrix Renormalization Group
Satyen V. Dhamankar and Benjamin W. Ong, Michigan Technological University, U.S.	25	Wednesday	PP2	Accelerated Boundary Integral Treecodes
Jorge Diaz-Castro , University of Puerto Rico, Puerto Rico	26	Tuesday	PP1	Lorenz vs. "Boids"
Bradley Dice and Carl S. Adorf, University of Michigan, Ann Arbor, U.S.; Vyas Ramasubramani, University of Michigan, U.S.; Paul Dodd, University of Michigan, Ann Arbor, U.S.; Sharon C. Glotzer, University of Michigan, U.S.	166	Tuesday	PP103	Minisymposium: Reproducible Computational Scientific Workflows with Signac
Kelsey Dipietro and Alan E. Lindsay, University of Notre Dame, U.S.	120	Tuesday	PP101	Minisymposium: Finite Difference Moving Mesh Methods for PDEs on Curved Domains
Kelsey Dipietro , University of Notre Dame, U.S.	134	Tuesday	PP102	Minisymposium: Finite Difference Moving Mesh for Nonlinear PDEs in Curved Domains
Zachary Douglas , University of Saint Mary, Kansas, U.S.	135	Tuesday	PP102	Minisymposium: Gaussian Processing for Coarse-grained Potential Development
Kathryn P. Drake and Grady B. Wright, Boise State University, U.S.	123	Tuesday	PP101	Minisymposium: Fast Algorithms for Cosmic Microwave Background Radiation Data on Healpix Points
Malena I. Espanol , Dmitry Golovaty, and J. Patrick Wilber, University of Akron, U.S.	27	Wednesday	PP2	Registry Effects in Carbon Nanostructures

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<i>Ionut-Gabriel Farcas</i> , Technische Universität München, Germany; Tobias Goerler, Max Planck Institute for Plasma Physics, Germany; Hans-Joachim Bungartz, Technische Universität München, Germany; Frank Jenko, Max Planck Institute for Plasma Physics, Germany; Tobias Neckel, Technische Universität München, Germany	28	Tuesday	PP1	Sensitivity-driven Dimension-adaptive Sparse Stochastic Approximations in Linear Gyrokinetics
<i>Joshua Finkelstein</i> , Giacomo Fiorin, and Benjamin Seibold, Temple University, U.S.	208	Wednesday	PP204	Minisymposium: Comparison of Modern Langevin Integrators for Simulations of Coarse-Grained Polymer Melts
<i>Jamie M. Finney</i> , Jakub Kurzak, Gerald Ragghianti, and Asim YarKhan, University of Tennessee, Knoxville, U.S.; Mark Gates and Piotr Luszczek, University of Tennessee, U.S.; Jack J. Dongarra, University of Tennessee and Oak Ridge National Laboratory, U.S.	167	Tuesday	PP103	Minisymposium: Slate: Developing Sustainable Linear Algebra Software for Exascale
<i>Yoko Franchetti</i> and Thomas Nolin, University of Pittsburgh, U.S.; Franz Franchetti, Carnegie Mellon University, U.S.	29	Wednesday	PP2	Towards Precision Medicine: Simulation Based Parameter Estimation for Drug Metabolism
<i>Ashley R. Gannon</i> , Florida State University, U.S.	30	Wednesday	PP2	Vesicle Adhesion in Constricted Geometries
<i>Uduak Z. George</i> , San Diego State University, U.S.; Sharon Lubkin, North Carolina State University, U.S.	31	Tuesday	PP1	Tissue Geometry May Govern Lung Branching Mode Selection
<i>Gianluca Geraci</i> , Sandia National Laboratories, U.S.; Alex A. Gorodetsky, University of Michigan, U.S.; Michael S. Eldred and John D. Jakeman, Sandia National Laboratories, U.S.	201	Wednesday	PP203	Minisymposium: Some Recent Advancements on Multifidelity Monte Carlo Techniques for Uncertainty Quantification
<i>Linda Gesenhues</i> , José Camata, and Fernando A. Rochinha, COPPE/Universidade Federal do Rio de Janeiro, Brazil; Alvaro Coutinho, Universidade Federal de Rio de Janeiro, Brazil	32	Wednesday	PP2	In-situ Visualization for a Viscoplastic Column Collapse
<i>Silke Glas</i> and Karsten Urban, University of Ulm, Germany	33	Wednesday	PP2	Elasticity in Space and Time
<i>Aparna S. Gollakota</i> , Loyola University Chicago, U.S.	137	Tuesday	PP102	Minisymposium: In Situ Analysis with Apache Spark
<i>Kevin N. Gott</i> , Lawrence Berkeley National Laboratory, U.S.	191	Wednesday	PP201	Minisymposium: An Overview of GPU Strategies for Porting Amrex-Based Applications to Next-generation HPC Systems
<i>Alexander Grannan</i> , Argonne National Laboratory, U.S.; Kanika Sood, Nisansa de Silva, and Boyana Norris, University of Oregon, U.S.; Anshu Dubey, Argonne National Laboratory, U.S.	168	Tuesday	PP103	Minisymposium: A Survey of Development Practices in High Performance Computing Applications
<i>Malú Grave</i> , Linda Gesenhues, and José Camata, COPPE/Universidade Federal do Rio de Janeiro, Brazil; Alvaro Coutinho, Universidade Federal de Rio de Janeiro, Brazil	34	Wednesday	PP2	Numerical Simulation of Basal Entrainment of a Viscoplastic Fluid
<i>Ruchi Guo</i> and Tao Lin, Virginia Tech, U.S.; Yanping Lin, Hong Kong Polytechnic University, China	35	Tuesday	PP1	A Fixed Mesh Method With Immersed Finite Elements for Solving Interface Inverse Problems
<i>Jordan R. Hall</i> , University of Colorado, Denver, U.S.	36	Tuesday	PP1	Performing Derivative-free Optimization using Active Subspaces and Random Walks
<i>Glenn Hammond</i> , Sandia National Laboratories, U.S.; Gautam Bisht, Lawrence Berkeley National Laboratory, U.S.	169	Tuesday	PP103	Minisymposium: A Look at PFLOTRAN's Cloud-based Continuous Integration
<i>Phebe Mawuena A. Havor</i> , Kwame Nkrumah University of Science and Technology, Ghana	37	Wednesday	PP2	Analysis of a Coupled Reaction-diffusion Model for Tumour Induced Angiogenesis in Breast Cancer Tissue
<i>Phebe Mawuena A. Havor</i> and Anas Musah, Kwame Nkrumah University of Science and Technology, Ghana	38	Wednesday	PP2	Dynamics of Disease Models with Self-diffusion: A Study of Cholera in Ghana
<i>Colleen Heinemann</i> , University of Illinois at Urbana-Champaign, U.S.	138	Tuesday	PP102	Minisymposium: Utilizing Graphics Techniques as a Means of Calculating Light Absorption in Staple Crops
<i>Michael P. Hennessey</i> , Donald W. Schwendeman, and Ashwani K. Kapila, Rensselaer Polytechnic Institute, U.S.	39	Wednesday	PP2	A High-resolution Godunov Method with HLLC Riemann Solver for Two-phase Modeling of Practical Condensed-phase Explosives
<i>Thi-Thao-Phuong Hoang</i> , Auburn University, U.S.	40	Wednesday	PP2	High-order Runge-Kutta Discontinuous Galerkin Methods with Local Time-stepping for Conservation Laws
<i>Kai-yuan Hou</i> , Northwestern University, U.S.	139	Tuesday	PP102	Minisymposium: Checkpoints Compression for Adjoint Computation
<i>Andy Huang</i> , Sandia National Laboratories, U.S.	41	Tuesday	PP1	An Isospectrum Remapping Scheme for Harmonic Balance Methods
<i>Sarah Huber</i> , Universität Wuppertal, Germany; Yasunori Futamura, University of Tsukuba, Japan; Martin Galgon and Bruno Lang, Universität Wuppertal, Germany; Tetsuya Sakurai, University of Tsukuba, Japan	42	Tuesday	PP1	Contour Integration and Moments for the Solution of Large Eigenproblems
<i>Stephen Hudson</i> , Argonne National Laboratory, U.S.; David S. Bindel, Cornell University, U.S.; Jeffrey Larson, Barry F. Smith, and Stefan Wild, Argonne National Laboratory, U.S.	170	Tuesday	PP103	Minisymposium: LibEnsemble + PETSc/TAO Sustaining a Library for Dynamic Ensemble-based Computations

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<i>Kathryn Huff</i> , University of Illinois at Urbana-Champaign, U.S.	171	Tuesday	PP103	Minisymposium: Sustaining Student Software
<i>Revathi Jambunathan</i> and Deborah Levin, University of Illinois, Urbana-Champaign, U.S.	43	Wednesday	PP2	Fully Kinetic PIC-DSMC Simulations to Study Backflow of Ion Thruster Plasma Plumes using Hybrid MPI-CUDA Paradigm
<i>Megan Johnson</i> , State University of New York at Buffalo, U.S.	121	Tuesday	PP101	Minisymposium: Classification of Vascular Disease Based on the Persistence Diagram using Topological Data Analysis (TDA) of Vascular Data
<i>Andrew Jones</i> , Boise State University, U.S.; Tien Yee and Eduardo Farfan, Kennesaw State University, U.S.	44	Wednesday	PP2	CFD and Heat Transport Study of Varying Pebble Diameters in Pebble Bed Nuclear Reactors
<i>Andrew Jones</i> , Boise State University, U.S.	140	Tuesday	PP102	Minisymposium: CFD Study of Varying Pebble Diameters in Pebble Bed Nuclear Reactors
<i>Ivana Jovanovic</i> , Technische Universität München, Germany	45	Tuesday	PP1	3D Deep Learning in High Resolution Point Clouds using the Grid-Octree Data Structure
<i>Shadi Tasdighi Kalat</i> , Worcester Polytechnic Institute, U.S.	46	Tuesday	PP1	A Computationally Inexpensive Approach to Set Partitioning with Applications to Optimal Planning for Large-scale Robot Swarms
Raymond H. Chan, Chinese University of Hong Kong, Hong Kong; <i>Kelvin Kan</i> , Emory University, U.S.; Mila Nikolova, CMLA, CNRS, ENS Cachan, France; Robert Plemmons, Wake Forest University, U.S.	47	Tuesday	PP1	A Two-stage Method for Spectral-Spatial Classification of Hyperspectral Images
<i>Daniel S. Katz</i> , University of Illinois at Urbana-Champaign, U.S.; Yadu Babuji, Kyle Chard, and Ben Clifford, University of Chicago, U.S.; Ian Foster, Argonne National Laboratory, U.S.; Lukasz Lacinski, University of Chicago, U.S.; Connor Pigg, University of Illinois, U.S.; Michael Wilde, Parallel Works, U.S.; Anna Woodard, University of Chicago, U.S.	172	Tuesday	PP103	Minisymposium: Productive and Sustainable Python Workflows in ParSL
<i>Mine Kaya</i> and Shima Hajimirza, Texas A&M University, U.S.	48	Tuesday	PP1	Efficient Black Box Optimization for Thin Film Solar Cell Design using Transfer Learning
<i>Chris Keckler</i> , University of California, Berkeley, U.S.; Yves Robert, INSA Lyon, France; Massimiliano Fratoni and Ehud Greenspan, University of California, Berkeley, U.S.	49	Wednesday	PP2	Validation of Assumptions in MILP Scheme for Determining Optimal Orificing in Fast Reactors using SAM
<i>Priscilla Kelly</i> , San Diego State University, U.S.	141	Tuesday	PP102	Minisymposium: Finite-difference Time-domain Method for AZO/ZnO Multilayered 1D Structures
<i>Eldar Khattatov</i> , Omar Ghattas, Tan Bui-Thanh, and Ilona Ambartsumyan, University of Texas at Austin, U.S.; Umberto Villa, Washington University, St. Louis, U.S.	50	Wednesday	PP2	Bayesian Inversion of Fault Properties in Two-phase Flow in Fractured Media
<i>Samuel Khuvis</i> and Judith Gardiner, Ohio Supercomputer Center, U.S.; Ian Howat, Ohio State University, U.S.; Caleb Lehman, Ohio Supercomputer Center, U.S.; Myoung-Jong Noh, Ohio State University, U.S.; Karen Tomko, Ohio Supercomputer Center, U.S.	173	Tuesday	PP103	Minisymposium: Improving the Development Workflow of the SETSM Photogrammetry Software
<i>Matthias Kirchhart</i> , RWTH Aachen University, Germany; Yutaka Kobayashi, Keio University, Japan	51	Tuesday	PP1	Vector Potentials for Incompressible Flows in Bounded Domains
<i>Matthew G. Knepley</i> , State University of New York at Buffalo, U.S.; Justin Chang, National Renewable Energy Laboratory, U.S.; Albert Cowie, State University of New York at Buffalo, U.S.	174	Tuesday	PP103	Minisymposium: Automated Performance Analysis with PETSc
<i>Avary Kolasinski</i> and Weizhang Huang, University of Kansas, U.S.	125	Tuesday	PP101	Minisymposium: A New Theory for Movement of Surface Meshes
<i>Fande Kong</i> , Derek R. Gaston, John Peterson, Cody J. Permann, and Richard Martineau, Idaho National Laboratory, U.S.	52	Wednesday	PP2	Flexible Parallel Mesh Partitioning Strategies for Large-scale Multiphysics Simulations
<i>Michal Kopera</i> , Boise State University, U.S.; Wieslaw Maslowski and Frank Giraldo, Naval Postgraduate School, U.S.	53	Tuesday	PP1	NUMO – A New Non-hydrostatic Ocean Model for Fjord Circulation and Ice-sheet/Ocean Interaction
<i>Boris Kovalerchuk</i> and Nathan Newhous, Central Washington University, U.S.	54	Wednesday	PP2	Machine Learning Algorithm to Support Interpretability and Accuracy Simultaneously
<i>Anuva Kulkarni</i> , Carnegie Mellon University, U.S.; Jelena Kovacevic, New York University, U.S.; Franz Franchetti, Carnegie Mellon University, U.S.	55	Wednesday	PP2	Algorithm Design at Scale: Porting Parallel FFT-based Fortran Simulations to GPUs
<i>Albert Lee</i> , Institute for Disease Modeling, U.S.	56	Tuesday	PP1	Linking Mechanistic Infectious Disease Models to Genomic Surveillance Data Reveals Transmission Properties
<i>Tyler Leibengood</i> , Youngstown State University, U.S.	143	Tuesday	PP102	Minisymposium: Network Traffic Performance Prediction with Multivariate Clusters in Time Windows
<i>Randall LeVeque</i> , University of Washington, U.S.; Christopher J. Vogl, Lawrence Livermore National Laboratory, U.S.	198	Wednesday	PP202	Minisymposium: Absorbing Outgoing Waves with Coordinate Mappings in Clawpack

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<i>Ying Liang</i> and Jun Zou, Chinese University of Hong Kong, Hong Kong	209	Wednesday	PP204	Minisymposium: Weak Galerkin Method for Electrical Impedance Tomography Inverse Problem
<i>Yuexia Lin</i> , Harvard University, U.S.; Ann S. Almgren, Brian Friesen, and Andrew Myers, Lawrence Berkeley National Laboratory, U.S.	192	Wednesday	PP201	Minisymposium: Performance Study of GPU Offloading via CUDA, OpenACC, and OpenMP in AMReX
<i>Chang Liu</i> and William Henshaw, Rensselaer Polytechnic Institute, U.S.	57	Wednesday	PP2	A Fourth-order Accurate Multigrid Solver for Overset Grids
<i>John Loffeld</i> , Teresa S. Bailey, Peter Brown, Adam Kunen, and Bujar Tagani, Lawrence Livermore National Laboratory, U.S.	58	Wednesday	PP2	Experiences Porting a Large-scale Deterministic Neutron Transport Application to Heterogeneous Architectures
<i>Niki A. Loppi</i> , Freddie Witherden, and Peter E. Vincent, Imperial College London, United Kingdom	59	Tuesday	PP1	A High-order Cross-platform Incompressible Navier-Stokes Solver via Artificial Compressibility with Application to Submarine Hydrodynamics
<i>Kevin Luna</i> , University of Arizona, U.S.	144	Tuesday	PP102	Minisymposium: Modification and Application of a Method for Studying Stability of High-speed Boundary Layers
<i>Juan Pablo Madrigal Cianci</i> and Fabio Nobile, École Polytechnique Fédérale de Lausanne, Switzerland; Raul F. Tempone, King Abdullah University of Science & Technology (KAUST), Saudi Arabia	202	Wednesday	PP203	Minisymposium: Markov Chain Monte Carlo Methods for Seismic Source Inversion
<i>Daniel Malmuth</i> and Grady B. Wright, Boise State University, U.S.; Varun Shankar, University of Utah, U.S.	60	Wednesday	PP2	Meshfree Semi-Lagrangian Schemes for Advection on Surfaces: Polyharmonic Splines Augmented with Polynomials
<i>Anthony Marcich</i> and Benjamin W. Ong, Michigan Technological University, U.S.	61	Tuesday	PP1	Fast Manifold Updates for Non-stationary Data Streams
<i>Osni A. Marques</i> , Lawrence Berkeley National Laboratory, U.S.	175	Tuesday	PP103	Minisymposium: Managing Software Development Requirements with user Stories
<i>Kathryn Maupin</i> and Laura Swiler, Sandia National Laboratories, U.S.	62	Tuesday	PP1	Calibration, Propagation, and Validation of Model Discrepancy Across Experiments
<i>Aimee Maurais</i> , Virginia Tech, U.S.	145	Tuesday	PP102	Minisymposium: Computational Tools for the Reconstruction of Atmospheric Aerosols via Spectroscopy
<i>Josh T. McConnell</i> and James C. Sutherland, University of Utah, U.S.	63	Wednesday	PP2	Coupling an Explicit Variable Density Projection Method to Finite Rate Kinetics
<i>Peter Mccorquodale</i> , Phillip Colella, and Brian Van Straalen, Lawrence Berkeley National Laboratory, U.S.; Christos Kavouklis, Lawrence Livermore National Laboratory, U.S.	64	Tuesday	PP1	A Low-communication Method to Solve Poisson's Equation on Locally-structured Grids
<i>Lois Curfman McInnes</i> , Argonne National Laboratory, U.S.	176	Tuesday	PP103	Minisymposium: Progress in CSE Software Ecosystems
<i>Pedro X. Medina</i> , University of Puerto Rico at Arecibo, Puerto Rico	146	Tuesday	PP102	Minisymposium: New Gene Editing Capabilities Against Vector-borne Infectious Diseases
<i>Kirsten Meeker</i> , US Naval Air Warfare Center, U.S.	65	Tuesday	PP1	Machine Learning of a Dynamical Systems Model of Aircraft Environmental Control System Pneumatics
<i>Carlos Michelen-Strofer</i> , Virginia Tech, U.S.	147	Tuesday	PP102	Minisymposium: PDE-informed Covariance for Model-form Uncertainty
<i>Tripti Midha</i> , Indian Institute of Technology Ropar, India	66	Tuesday	PP1	The Theoretical and Computational Analysis of the Non-conserved Interactive Driven Diffusive Systems
<i>Reed Milewicz</i> , Sandia National Laboratories, U.S.; Jeffrey C. Carver, University of Alabama, U.S.	177	Tuesday	PP103	Minisymposium: Software Engineering for Research Software
<i>Azahar Monge</i> and Philipp Birken, Lund University, Sweden	67	Wednesday	PP2	A Time Adaptive Multirate Dirichlet-Neumann Waveform Relaxation Method for Heterogeneous Coupled Heat Equations
<i>Guy C. Moore</i> and Andrew Nonaka, Lawrence Berkeley National Laboratory, U.S.	193	Wednesday	PP201	Minisymposium: Application of Implicit Methods for Complex Fluid Flow
<i>Hannah M. Morgan</i> , Argonne National Laboratory, U.S.; Patrick Sanan, Università della Svizzera italiana, Switzerland; Matthew G. Knepley, State University of New York at Buffalo, U.S.	68	Tuesday	PP1	The Impact of Noise on Krylov Methods
<i>Zachary B. Morrow</i> , ELENA Jakubikova, Tim Kelley, and Chang Liu, North Carolina State University, U.S.; Miroslav Stoyanov, Oak Ridge National Laboratory, U.S.	69	Wednesday	PP2	Sparse Fourier Interpolation in Computational Chemistry
Richard J. Zamora, Argonne National Laboratory, U.S.; Christoph Junghans and <i>David Moulton</i> , Los Alamos National Laboratory, U.S.	178	Tuesday	PP103	Minisymposium: IDEAS PSIP in Practice: Adopting Continuous Integration for Exascale MD
<i>Benson K. Muite</i> , University of Tartu, Estonia	70	Tuesday	PP1	Benchmarking as an Aid to Selecting the Right Hardware Architecture and Numerical Method

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Daniel Garcia, Basque Center for Applied Mathematics, Spain; David Pardo, University of the Basque Country, Spain; Victor Calo, King Abdullah University of Science & Technology (KAUST), Saudi Arabia; <i>Judit Muñoz-Matute</i> , University of the Basque Country, Spain	71	Tuesday	PP1	Refined Isogeometric Analysis (rIGA): A Fluid Flow Application
<i>Andrew Myers</i> , Ann S. Almgren, John B. Bell, Marcus Day, Brian Friesen, Kevin N. Gott, Andy J. Nonaka, Steven Reeves, and Weiqun Zhang, Lawrence Berkeley National Laboratory, U.S.	194	Wednesday	PP201	Minisymposium: Overview of Amrex - a New Framework for Block-structured Adaptive Mesh Refinement Calculations
<i>Sebastian Naranjo</i> , Oregon State University	142	Tuesday	PP102	Minisymposium: A Low Order Mimetic Finite Difference Method in 2-D For Resistive MHD
<i>Sara Nasab</i> , University of California, Santa Cruz, U.S.	195	Wednesday	PP201	Minisymposium: Building a Microphysics Cloud Model with AMReX and PADDI
<i>Kyle E. Niemeyer</i> , Oregon State University, U.S.; Arfon Smith, Space Telescope Science Institute, U.S.; Lorena Barba, George Washington University, U.S.; Jed Brown, University of Colorado Boulder, U.S.; Jason Clark, Montana State University, U.S.; George Githinji, Wellcome Trust, United Kingdom; Melissa Gymrek, University of California, San Diego, U.S.; Lindsey Heagy, University of British Columbia, Canada; Kathryn Huff, University of Illinois at Urbana-Champaign, U.S.	179	Tuesday	PP103	Minisymposium: The Journal of Open Source Software
<i>Andre Ganesini Odu</i> and Jeffrey W. Banks, Rensselaer Polytechnic Institute, U.S.	72	Wednesday	PP2	High-order Accurate Vlasov Discretizations in 2D+2V
<i>Santiago Ospina De Los Ríos</i> , Peter Bastian, Kurt Roth, and Lukas Riedel, Universität Heidelberg, Germany	210	Wednesday	PP204	Minisymposium: Conservative Higher-Order Method for the Solute Transport Equation in Unsaturated Porous Media
<i>Jeungeun Park</i> and Tong Li, University of Iowa, U.S.	73	Tuesday	PP1	Stability of Traveling Wave Solutions of Nonlinear Conservation Laws for Image Processing
<i>Abani K. Patra</i> , State University of New York, Buffalo, U.S.	74	Wednesday	PP2	Forecasting Volcanic Eruption Time using a Stochastic Enhancement of the Failure Forecast Method
<i>Petr Pelech</i> , Charles University, Czech Republic; Martin Kruzik, Academy of Sciences of the Czech Republic, Prague, Czech Republic; Anja Schloemerker, Universitaet Wuerzburg, Germany	211	Wednesday	PP204	Minisymposium: Regularization of Rate-Independent Evolution of SMA Described by Non-Convex Energies
<i>Lana Perisa</i> and Daniel Kressner, École Polytechnique Fédérale de Lausanne, Switzerland	75	Wednesday	PP2	Randomized Methods for Recompression of Low-rank Tensors
<i>Tom Peterka</i> , Youssef Nashed, Iulian Grindeanu, and Vijay Mahadevan, Argonne National Laboratory, U.S.; Raine Yeh and Xavier M. Tricoche, Purdue University, U.S.	76	Wednesday	PP2	A Continuous Model of Discrete Scientific Data
<i>Katrina Petroske</i> , North Carolina State University, U.S.	122	Tuesday	PP101	Minisymposium: A Randomized, Inexact, Newton-based Approach for Quantitative Photo-acoustic Tomography
<i>Michael Pilosov</i> , University of Colorado, Denver, U.S.	77	Wednesday	PP2	Using Push-forward Measures for Parameter Identification under Uncertainty
<i>Stanislav Y. Polishchuk</i> , Hans De Sterck, and Tiangang Cui, Monash University, Australia	78	Wednesday	PP2	Multi-level and Multi-index Monte Carlo Discontinuous Galerkin Methods for Uncertainty Quantification of Nonlinear Hyperbolic Problems
Michael Obersteiner and Hans-Joachim Bungartz, Technische Universität München, Germany; Dirk Pflüger and <i>Theresa Pollinger</i> , Universität Stuttgart, Germany	79	Wednesday	PP2	A Highly Scalable, Fault-tolerant Implementation of the Sparse Grid Combination Technique
<i>Xinsheng Qin</i> , Randall LeVeque, and Michael Motley, University of Washington, U.S.	199	Wednesday	PP202	Minisymposium: Accelerating Wave-propagation Algorithms with Adaptive Mesh Refinement Using the Graphics Processing Unit (GPU)
<i>Vyas Ramasubramani</i> , University of Michigan, U.S.; Carl S. Adorf, University of Michigan, Ann Arbor, U.S.; Joshua Anderson and Sharon Glotzer, University of Michigan, U.S.	180	Tuesday	PP103	Minisymposium: How to Professionally Develop Reusable Scientific Software – and When Not To
<i>Pooja Rao</i> , University of Illinois at Urbana-Champaign, U.S.	148	Tuesday	PP102	Minisymposium: Numerical Study of Impact of Interparticle Interactions on Particle Dynamics in Lab Generated Spark Discharge Plasma
<i>Timothy Reid</i> , North Carolina State University, U.S.	212	Wednesday	PP204	Minisymposium: Computational Developments for the Bayesian Conjugate Gradient Method
<i>Anne Reinarz</i> and Michael Bader, Technische Universität München, Germany	181	Tuesday	PP103	Minisymposium: Exahype: An Exascale Hyperbolic PDE Engine
<i>Michael A. Retzlaff</i> and Andrei Draganescu, University of Maryland, Baltimore County, U.S.	80	Wednesday	PP2	Multigrid Preconditioning for Optimization-based Domain Decomposition of the Helmholtz Equation
<i>Jacob D. Rezac</i> , National Institute of Standards and Technology, U.S.	81	Wednesday	PP2	Reconstruction of Sparse Sums with a Generalized Music Algorithm

CSE19 Poster Board Assignments

Alphabetical by Presenter

<i>Ryan Richard</i> , Iowa State University, U.S.; Kristopher Keipert, Argonne National Laboratory, U.S.; Thom Dunning, University of Washington, U.S.; Robert Harrison, Stony Brook University, U.S.; Theresa Windus, Iowa State University, U.S.	182	Tuesday	PP103	Minisymposium: The NWChemEX Simulation Development Environment - A General Computational Chemistry Software Framework
<i>Chris Richardson</i> , Garth Wells, and Nathan Sime, University of Cambridge, United Kingdom	183	Tuesday	PP103	Minisymposium: Changing Mindsets for Large-scale Modelling
<i>Hannah Rittich</i> , Forschungszentrum Jülich, Germany	82	Tuesday	PP1	LFA Lab - Flexible Local Fourier Analysis Library
<i>Mickaël Rivier</i> and Pietro M. Congedo, Inria Bordeaux Sud-Ouest, France	83	Wednesday	PP2	Different Measure Approximations for Efficient Constrained Multi-objective Optimization under Uncertainty
<i>Carlos A. Romano</i> , Universidad Nacional Autónoma de México, Mexico; Martin Diaz, Instituto Mexicano del Petróleo, México	84	Wednesday	PP2	Modeling of Low Salinity Water Flooding in Naturally Fractured Core Samples
<i>Jon Rood</i> and Shreyas Ananthan, National Renewable Energy Laboratory, U.S.	184	Tuesday	PP103	Minisymposium: Increasing Software Testing Coverage and Portability with Spack
<i>Dan Rosa</i> , University of Puerto Rico, Puerto Rico	149	Tuesday	PP102	Minisymposium: Capsule Networks for Protein Structure Classification
<i>Chrysm Watson Ross</i> , University of New Mexico, U.S.	128	Tuesday	PP101	Minisymposium: Troll Hunter: Understanding Swarm Behavior in Social Networks
<i>Caitlin Ross</i> , Rensselaer Polytechnic Institute, U.S.	150	Tuesday	PP102	Minisymposium: In Situ Performance Analysis of HPC Network Simulations
<i>Kathryn Rouse</i> , Inmar; Grey Ballard, Wake Forest University, U.S.; Nicholas Knight, University of California, Merced, U.S.	85	Wednesday	PP2	Communication Lower Bounds for Computing a Matricized-tensor Times Khatri-Rao Product
<i>Johann Rudi</i> , Argonne National Laboratory, U.S.; Georg Stadler, Courant Institute of Mathematical Sciences, New York University, U.S.; Omar Ghattas, University of Texas at Austin, U.S.	86	Tuesday	PP1	Improved Newton Linearization for L1L1-Norm-Type Minimization with Application to Viscoplastic Fluid Solvers
<i>Fakhteh Saadatniaki</i> , Tufts University, U.S.	130	Tuesday	PP101	Minisymposium: Computationally Efficient Fast Optimization over Time-varying Directed Graphs
<i>Jai Sachdev</i> , Marina Gorelenkova, Xingqiu Yuan, Joshua Breslau, and Francesca Poli, Princeton Plasma Physics Laboratory, U.S.	185	Tuesday	PP103	Minisymposium: Modernizing the Scientific Software Approach for the Fusion Analysis Code Transp
<i>Zahmeeth Sayed Sakkaff</i> , University of Nebraska, Lincoln, U.S.	151	Tuesday	PP102	Minisymposium: Molecular Communication in Biological Cells: Foundational Study and Development of Computational Techniques
<i>William A. Sands</i> , Andrew J. Christlieb, and Yan Jiang, Michigan State University, U.S.	87	Wednesday	PP2	A Kernel-based Approach for Solving the Hamilton-Jacobi Formulation of the Vlasov-Poisson System
<i>Paul Cristian Sarbu</i> and Hans-Joachim Bungartz, Technische Universität München, Germany	88	Wednesday	PP2	Sparse Grid Density Estimation Techniques for Clustering-based Collocation
<i>Neeraj Sarna</i> and Manuel Torrilhon, RWTH Aachen University, Germany	89	Tuesday	PP1	Adjoint Based H-(m)odel Adaptive Scheme for Linearised Boltzmann Equation
<i>Mohammad Sarraf Joshaghani</i> , University of Houston, U.S.; Justin Chang, Rice University, U.S.; Kalyana Nakshatrala, University of Houston, U.S.; Matthew G. Knepley, State University of New York at Buffalo, U.S.	90	Tuesday	PP1	On Composable Block Solvers and Performance Spectrum Model for the Four-Field Double Porosity/permeability Model
<i>Ibrahim O. Sarumi</i> and Khaled Furati, King Fahd University of Petroleum and Minerals, Saudi Arabia; Abdul Khaliq, Middle Tennessee State University, U.S.	91	Wednesday	PP2	ETD Algorithm for Fractional Model of Pressure Distribution in Fractured Rocks
<i>Naw Safrin Sattar</i> , University of New Orleans, U.S.	152	Tuesday	PP102	Minisymposium: A Comparative Analysis of Parallel Louvain Algorithms for Community Detection
<i>Alexandru Savoiu</i> , Stanford University, U.S.	92	Wednesday	PP2	Deep Learning - Neural Networks
<i>Joseph Schiff</i> , California State University, Long Beach, U.S.	93	Tuesday	PP1	An Immersed Boundary, Fourier Pseudospectral Method for Advection-Diffusion-Reaction in Incompressible Flow
<i>Steffen Seckler</i> and Nikola Tchipev, Technische Universität München, Germany; Matthias Heinen, University of Paderborn, Germany; Fabio A. Gratl and Hans-Joachim Bungartz, Technische Universität München, Germany; Philipp Neumann, University of Hamburg, Germany	94	Wednesday	PP2	MPI-OpenMP Load Balanced Simulation of Inhomogeneous Particle Systems in Is1 Mardyn at Extreme Scale
<i>Sergio Servantez</i> , Illinois Institute of Technology, U.S.	153	Tuesday	PP102	Minisymposium: Collective I/O using RAM Area Network (RAN)
<i>Sonny R Sevin</i> , Slippery Rock University of Pennsylvania, U.S.	154	Tuesday	PP102	Minisymposium: Analyzing and Evaluating Resilience of Scheduling Scientific Applications

CSE19 Poster Board Assignments

Alphabetical by Presenter

Sage B. Shaw and Grady B. Wright, Boise State University, U.S.; Varun Shankar, University of Utah, U.S.	95	Wednesday	PP2	A Comparison of RBF-FD Methods for Solving Partial Differential Equations on Surfaces
Ruslan Shaydulín , Clemson University, U.S.	155	Tuesday	PP102	Minisymposium: Quantum Local Search for Graph Community Detection
Choah Shin , Oregon State University, U.S.	156	Tuesday	PP102	Minisymposium: Blow-up Behavior of Conservation Law with Spatially Varying Flux
Romulo M. Silva and Benaia Lima, Universidade Federal de Rio de Janeiro, Brazil; José Camata, COPPE/Universidade Federal do Rio de Janeiro, Brazil; Renato Elias and Alvaro Coutinho, Universidade Federal de Rio de Janeiro, Brazil	96	Tuesday	PP1	Communication-avoiding Mesh Multiplication for Large-scale Unstructured Meshes
David Sirajuddin and William Hitchon, University of Wisconsin, Madison, U.S.	97	Wednesday	PP2	A Weighted Essentially Non-oscillatory Forward Semi-Lagrangian Scheme for Vlasov-Poisson Systems
Spencer Smith , McMaster University, Canada	186	Tuesday	PP103	Minisymposium: No Need for Excuses: Applying Software Engineering Principles to Facilitate Scientific Software Documentation
Kanika Sood , Nisansa Silva, and Boyana Norris, University of Oregon, U.S.; Anshu Dubey and Lois Curfman McInnes, Argonne National Laboratory, U.S.	187	Tuesday	PP103	Minisymposium: Analyzing Open-source Scientific Software Projects
Aleksei Sorokin , Illinois Institute of Technology, U.S.; Andy Liu, Illinois Mathematics and Science Academy, U.S.; Sou-Cheng T. Choi, Illinois Institute of Technology, U.S. and Allstate Insurance Corporation, U.S.	188	Tuesday	PP103	Minisymposium: A Software Productivity and Sustainability Case Study: Multithreaded Requests to Cloud Services for Intelligent Address Standardization
Melissa Spence , University of California, Merced, U.S.	124	Tuesday	PP101	Minisymposium: Detecting Novel Structural Variants in Genomes by Leveraging Parent-child Relatedness
Sarat Sreepathi , Oak Ridge National Laboratory, U.S.; Zachary Mitchell, Pellissippi State Community College, U.S.; Gaurab Kc, University of Tennessee, Knoxville, U.S.	98	Tuesday	PP1	Performance Analytics for Computational Experiments (PACE)
Jared Stewart , University of California, Merced, U.S.	99	Wednesday	PP2	Comparative Study of Exponential Time Integrators for Chemical Kinetic Problems
Renee Swischuk , Massachusetts Institute of Technology, U.S.; Karen E. Willcox, University of Texas at Austin, U.S.	100	Tuesday	PP1	Physics Constrained Machine Learning
Alexander Litvinenko and Raul F. Tempone , King Abdullah University of Science & Technology (KAUST), Saudi Arabia; Abdulkadir YuceI, Nanyang Technological University, Singapore; Hakan Bagci, King Abdullah University of Science & Technology (KAUST), Saudi Arabia; Jesper Oettel, KTH Royal Institute of Technology, Sweden; Erik Michielssen, University of Michigan, U.S.	203	Wednesday	PP203	Minisymposium: Computation of Electromagnetic Fields Scattered From Objects of Uncertain Shapes Using Multilevel Monte Carlo
Kaayla Tippins , Jarvis Christian College, U.S.	157	Tuesday	PP102	Minisymposium: Utilization of the Polymerase Chain Reaction and DNA Barcoding Method in Bioinformatics for the Identification of Unknown Fish Species
Jeremy Trageser and Pablo Seleson, Oak Ridge National Laboratory, U.S.	101	Wednesday	PP2	Anisotropy in Two-dimensional and Plane Elasticity Bond-based Linear Peridynamics
Imelda Trejo , University of Texas at Arlington, U.S.	126	Tuesday	PP101	Minisymposium: Modeling the Effects of Macrophages on Bone Fracture Healing
Panagiotis Tsilifis , Juan Pablo Madrigal Cianci, and Fabio Nobile, École Polytechnique Fédérale de Lausanne, Switzerland	204	Wednesday	PP203	Minisymposium: Kullback-Leibler Algorithms for Bayesian Inverse Problems using Multi-Level Monte Carlo Methods
Robert R. Underwood , Jon Calhoun, and Amy Apon, Clemson University, U.S.	102	Tuesday	PP1	Predicting Optimal Error Bounded Lossy Compression Configuration for Sampled Data
Mollie Van Gordon and Joshua Proctor, Institute for Disease Modeling, U.S.	103	Tuesday	PP1	A Dynamical Systems Approach to Transforming Disparate Timescales in Data Driven Equation-free Modeling of Disease Dynamics
Pablo Stinga and Mary Vaughan , Iowa State University, U.S.	127	Tuesday	PP101	Minisymposium: Fractional Derivatives and Laplacians in One and Two-sided Weighted Sobolev Spaces
Thibaud Vazquez-Gonzalez and Antoine Llor, CEA, France	104	Tuesday	PP1	A Variational Approach to Design a Numerical Scheme for N-Fluid Flow
Christopher J. Vogl , Lawrence Livermore National Laboratory, U.S.; Randall LeVeque, University of Washington, U.S.	200	Wednesday	PP202	Minisymposium: Evaluation of Shallow Water Models for Tsunami Prediction with a Near-field Seismic Source
Toni Volkmer , Dominik Alfke, Daniel Potts, and Martin Stoll, Chemnitz University of Technology, Germany	105	Wednesday	PP2	NFFT-based Fast Summation for the Graph Laplacian of Fully Connected Networks
Siddhant Wahal and Biros George, University of Texas at Austin, U.S.	106	Tuesday	PP1	Using Bayesian Inference to Evaluate Rare Event Probabilities
Chunmei Wang , Texas Tech University, U.S.	107	Wednesday	PP2	Primal-dual Weak Galerkin Finite Element Methods for PDEs

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Zhongjian Wang , University of Hong Kong, Hong Kong; Jack Xin, University of California, Irvine, U.S.; Zhiwen Zhang, The University of Hong Kong, Hong Kong	108	Wednesday	PP2	Sharp Uniform in Time Error Estimate on a Stochastic Structure-preserving Lagrangian Method and Computation of Effective Diffusivity in 3D Chaotic Flows
Xiange "Shirley" Wang , Hood College, U.S.	158	Tuesday	PP102	Minisymposium: Using Deep Learning on Medical Data for Suicide Prevention
Steffen W. R. Werner and Peter Benner, Max Planck Institute for Dynamics of Complex Technical Systems, Germany	213	Wednesday	PP204	Minisymposium: MORLAB - Model Order Reduction LABORatory
Christine Wiersma and James A. Rossmanith, Iowa State University, U.S.	109	Tuesday	PP1	Locally-implicit Discontinuous Galerkin Schemes with Limiters that Guarantee Moment-Invertibility for Hyperbolic Quadrature-Based Moment Closures
Christine Wiersma , Iowa State University, U.S.	159	Tuesday	PP102	Minisymposium: Locally-implicit Discontinuous Galerkin Schemes with Limiters that Guarantee Moment-Invertibility for Hyperbolic Quadrature-based Moment Closures
Donald E. Willcox and Ann S. Almgren, Lawrence Berkeley National Laboratory, U.S.; Daniel Kasen, University of California, Berkeley, U.S.; Andrew Myers and Weiqun Zhang, Lawrence Berkeley National Laboratory, U.S.	196	Wednesday	PP201	Minisymposium: SedonaEx: A Monte Carlo Radiation Transfer Code for Astrophysical Events
Kwai L. Wong , University of Tennessee and Oak Ridge National Laboratory, U.S.; Chung Ng and Efosa Asemota, Morehouse College, U.S.; Frank Betancourt, University of Tennessee, U.S.; Quindell Marshall, Morehouse College, U.S.; Zac Trzil, University of Tennessee, U.S.	110	Wednesday	PP2	User Interfaces and Practical Examples of Opendiel
Jinlong Wu and Carlos Michelen-Strofer, Virginia Tech, U.S.; Jianxun Wang, University of Notre Dame, U.S.; Heng Xiao, Virginia Tech, U.S.	111	Tuesday	PP1	Physics-informed Machine Learning for Data-driven Turbulence Modeling
Yuyun Yang , Stanford University, U.S.	160	Tuesday	PP102	Minisymposium: Application of the Ensemble Kalman Filter in Tsunami Wavefield Reconstruction
Yufei Yu , University of Kansas, U.S.	129	Tuesday	PP101	Minisymposium: AWM Selection of the Regularization Parameter in the Ambrosio - Tortorelli Approach to Image Segmentation
Anna Yurova and Katharina Kormann, Max Planck Institute for Plasma Physics, Germany; Caroline Lasser, Technische Universität München, Germany	112	Wednesday	PP2	Spectral Velocity Discretization of the Vlasov Equation using Generalized Hermite Functions
Zakia Zainib , Maria Strazzullo, Francesco Ballarin, and Gianluigi Rozza, SISSA, International School for Advanced Studies, Trieste, Italy	214	Wednesday	PP204	Minisymposium: Reduced Order Methods for Parametrized Optimal Flow Control Problems: Applications in Biomedical and Environmental Marine Sciences
He Zhang , Thomas Jefferson National Accelerator Facility, U.S.; He Huang and Li-Shi Luo, Old Dominion University, U.S.	113	Tuesday	PP1	Fast Multipole Method for Non-oscillating Kernel Based on Cartesian Tensor and Differential Algebra
Linan Zhang and Hayden Schaeffer, Carnegie Mellon University, U.S.	114	Wednesday	PP2	Forward Stability of ResNet and its Variants
Yunkai Zhang , University of California, Santa Barbara, U.S.; Yu Ma, University of California, Berkeley, U.S.; Zhaoqi Li, University of Washington, U.S.; Catalina Vajiac, University of Notre Dame, U.S.	115	Wednesday	PP2	Exploration of Numerical Precision in Deep Neural Networks
Zicong Zhou and Guojun Liao, University of Texas at Arlington, U.S.	116	Wednesday	PP2	A Novel Method to Average Images by Averaging Diffeomorphisms
Qiao Zhuang and Ruchi Guo, Virginia Tech, U.S.	117	Wednesday	PP2	High Degree Discontinuous Petrov-Galerkin Immersed Finite Element Methods using Fictitious Elements for Elliptic Interface Problems
Alexander G. Zimmerman and Julia Kowalski, RWTH Aachen University, Germany	118	Wednesday	PP2	Monolithic Simulation of Binary Alloy Phase-change Coupled to Thermal and Compositional Convection