

SIAM

Poster Session Locator- By Last Name

Last Name	First Name	Poster #	Poster Title	Day
Abdelfatah	Kareem	198	Analytical Stacked Gaussian Process Model	Tuesday
Adams	Jesse	83	A Numerical Method for High Energy X-Ray Source Shape Reconstruction	Tuesday
Ahmad	Sanwar	84	Electrical Impedance Tomography for Damage Detection in Concrete	Tuesday
Ahn	Surl-Hee	154	Minisymposium: Efficiently Exploring the Conformational Space of Proteins Using the Concurrent Adaptive Sampling Algorithm	Tuesday
Akinlabi	Emmanuel	184	Simulation of Cerebrospinal Fluid Flow Using Finite Pointset Method	Tuesday
Aksoy	Sinan	5	Measuring and Modeling Bipartite Graphs with Community Structure	Tuesday
Al Farhan	Mohammed	32	Implicit Unstructured Aerodynamics on Emerging Multi and Many-Core HPC Architectures	Tuesday
Alalyani	Ahmad	182	Minisymposium: Eigenvalue Computation for 4th Order Sturm Liouville Equations: Magnus Methods	Tuesday
Aldegunde	Manuel	199	Uncertainty Quantification in Multi-Scale Materials Modeling	Tuesday
Alemazkoor	Negin	200	Near-Optimal Sampling Approach for Estimating Sparse Polynomial Chaos Expansions	Tuesday
Algarni	Said	6	Pad'e Time-Stepping Methods for Solving Partial Differential Equations	Tuesday
Alnæs	Martin	109	Minisymposium: Sustainable Productivity in the Fenics Development Team	Wednesday
Alonazi	Amani	33	Asynchronous Task-Based Parallelization of Algebraic Multigrid	Tuesday
Alqahtani	Rubayyi	34	Mathematical Analysis of Sludge Disintegration	Tuesday
Amanbek	Yerlan	185	Selective Time Step Adaptivity for Non-Linear Reactive Transport Problems	Tuesday
Andrade Moraes	Ígor	59	Methodology for Optimized Generation of Virtual Environments Based on Hydroelectric Power Plants	Tuesday
Angel	Jordan	7	Upwind Dissipation for Stability on Composite Grids	Tuesday
Appleton	Jay	186	Explicit Continuous Finite Element Methods on Triangles	Tuesday
Arbogast	Todd	162	Minisymposium: Two Families of H(div) Mixed Finite Elements of Minimal Dimension on Quadrilaterals	Tuesday
Arnold	Douglas	163	Minisymposium: Approximation on Quadrilateral and Hexahedral Meshes	Tuesday
Asante-Asamani	Emmanuel	196	A Two Phase Approach for Modeling Sedimentation of Pigments in Liquid Coating Formulations	Tuesday
Atkinson	Steven	205	Fully Bayesian Deep Gaussian Processes for Uncertainty Quantification	Tuesday
Austin	Anthony	8	Polynomial Filtering for Large, Sparse SVD Computations	Tuesday
Babenko	Vira	9	Numerical Analysis of Set and Fuzzy Integral Equations and Its Applications	Tuesday
Bao	Casie	206	Compressed Sensing with Corrupted Measurements and Its Application to Uncertainty Quantification	Tuesday
Barba	Lorena	1	Numerical MOOC: Collaborating in Open Education for CSE	Tuesday
Bardhan	Jaydeep	110	Minisymposium: A Sustainable Software Architecture for Scalable Nonlinear Boundary Element Method Simulations	Wednesday
Bartlett	Roscoe	111	Minisymposium: The Application of Tribits to the Development and Integration Processes of Larger Componentized Multi-Organization Scientific and Engineering Software Projects	Wednesday
BE Program	TBA	171	BE Program Poster	Wednesday
BE Program	TBA	172	BE Program Poster	Wednesday
BE Program	TBA	173	BE Program Poster	Wednesday
BE Program	TBA	174	BE Program Poster	Wednesday
BE Program	TBA	175	BE Program Poster	Wednesday
BE Program	TBA	176	BE Program Poster	Wednesday
BE Program	TBA	177	BE Program Poster	Wednesday
BE Program	TBA	178	BE Program Poster	Wednesday
BE Program	TBA	179	BE Program Poster	Wednesday
BE Program	TBA	180	BE Program Poster	Wednesday
BE Program	TBA	181	BE Program Poster	Wednesday

SIAM

Last Name	First Name	Poster #	Poster Title	Day
Billings	Jay	112	Minisymposium: Doecode: The New Department of Energy Software Center	Wednesday
Bingham	Brianna	2	Krylov Subspace Spectral Methods for Navier-Stokes in Cylindrical Geometries	Tuesday
Blatt	Markus	96	The "Open Porous Media Initiative" (OPM) Software	Tuesday
Bootland	Niall	E5	Preconditioning for Incompressible Two-Phase Flow	Tuesday
Borggaard	Jeff	187	The Stability Region for Feedback Control of the Wake Behind Twin Oscillating Cylinders	Tuesday
Bresten	Chris	10	The Reduced Collocation Method for Nonlinear Steady-State PDEs	Tuesday
Brown	Matthew	11	Iterative Hybrid Methods with Wavelet Denoising	Tuesday
Budiardja	Reuben	35	Neutrino Radiation Hydrodynamics in Genesis	Tuesday
Calandrini	Sara	188	Numerical Simulations for Fluid-Structure Interaction Modeling of Artery Aneurysms	Tuesday
Calhoun	Donna	148	Minisymposium: ForestClaw : Parallel Library for Solving Pdes on Mapped Multiblock Quadtree Grids	Tuesday
Campbell	Kyle	103	Modeling Multiphase Buoyancy Driven Plume Migration During Geologic Co2 Injection	Tuesday
Capodaglio	Giacomo	189	A Parallel Particle Tracking Algorithm for Finite Element Applications	Tuesday
Cardoso	Alexandre	69	Project Research Model Canvas An Auxiliary Tool to Create and Manage Research Projects	Tuesday
Cardoso	Alexandre	70	A Virtual Reality Based Approach to Improve Human Performance and to Minimize Safety Risks When Operat-Ing Power Electric Systems	Tuesday
Cardoso	Alexandre	71	A Strategy to Improve 3D Arrangement Modeling on Virtual Electrical Substations	Tuesday
Carlberg	Kevin	E6	Nonlinear Model Reduction in Computational Fluid Dynamics	Tuesday
Catanach	Thomas	81	Second-Order Langevin Markov Chain Monte Carlo	Tuesday
Chaabane	Nabil	36	A Splitting Discontinuous Galerkin Method for the Coupling of Flow and Geomechanics	Tuesday
Chandramoorthy	Nisha	43	Why Is the Ensemble Adjoint Approach to Sensitivity Analysis Not Practical in Chaotic Systems?	Tuesday
Chandrashekar	Pooja	106	A Novel Speech-Based Diagnostic Test for Parkinson's Disease Integrating Machine Learning with Application Development for Cloud Deployment	Tuesday
Chen	XI	107	Protein NMR Reference Correction: A Statistical Approach for an Old Problem	Tuesday
Chowdhary	Kenny	72	Fast and Efficient Hyperbolic Embeddings for Large Graphs	Tuesday
Chumburidze	Manana	12	Numerical Solutions of Basic Boundary-Contact Problems of Tumor-Brain Interface Tissues	Tuesday
Clark	Uthman	44	Computational Modeling of Shock Wave Reflections Over a Wedge	Tuesday
Co	Tomas	19	Direct Solution of High-Dimension Sylvester Equations	Tuesday
Cook	Laurence	207	Horsetail Matching: A Flexible Approach to Optimization Under Probabilistic and Interval Uncertainties	Tuesday
Costa	Timothy	60	Accelerating Multiplication of Small Or Skinny Matrices with Intel® Math Kernel Library Packed GEMM Routines	Tuesday
Cramer	Eric	183	Minisymposium: A Sturm Liouville Problem for Relativistic Electrons Inside Thunderstorms	Tuesday
Crone	Joshua	48	Dislocation Dynamics Simulations of Void and Precipitate Strengthening	Tuesday
Danes	Nicholas	92	A Mathematical Model of Hemostasis	Tuesday
D'Elia	Marta	155	Minisymposium: A Coupling Strategy for Nonlocal and Local Models	Tuesday
Delzanno	Gian Luca	143	Minisymposium: New Hybrid Method for the Vlasov-Maxwell System: Coupling of Spectral and Pic Methods	Tuesday
Dillon	Geoffrey	20	A Multilevel Low-Rank Preconditioner for Indefinite Linear Systems	Tuesday
Dodoo-Amoo	David	93	An IDS Study of Flow over A Leading Edge	Tuesday
Dogan	Gunay	E11	Scikit-Shape: A Python Package for Shape Optimization and Analysis	Tuesday
Dukhan	Marat	113	Minisymposium: PEACHPY.IO, a Web App for Performance Tuning	Wednesday
Fairbanks	Hillary	208	A Bi-Fidelity, Low-Rank Approximation Technique for Uncertainty Quantification	Tuesday
Fox	Zachary	108	Identification of Gene Regulatory Models Using Data-Driven Reduction of the Chemical Master Equation	Tuesday
Fu	Guosheng	164	Minisymposium: Bernstein-B'ezier Basis for H(div) and H(curl) Finite Elements on Hypercubes	Tuesday
Gahvari	Hormozd	67	Setting Tunable Solver Parameters with Performance Models	Tuesday

SIAM

Last Name	First Name	Poster #	Poster Title	Day
Gamblin	Todd	114	Minisymposium: Managing the Scientific Software Ecosystem with Spack	Wednesday
Gan	Zecheng	190	Boundary Integral and Image-Moment Hybrid Method for Simulations of Solvated Proteins	Tuesday
Garay	Jose	45	Asynchronous Optimized Schwarz Method for Poisson Equation in Rectangular Domains	Tuesday
Gemayel	Karl	62	Improving Ab Initio Gene Prediction in Prokaryotic Genomes	Wednesday
Gilles	Marc Aurele	3	A Subspace Pursuit Method to Invert the Refractivity Profile within the Marine Atmospheric Boundary Layer	Tuesday
Gobbert	Matthias	144	Minisymposium: Performance Comparisons of Application Codes on Modern Computer Architectures	Tuesday
Gomes	Anna Karina	46	A Resistive Magneto-Hydrodynamic Numerical Model in the Context of Cell-Averaged Adaptive Multiresolution Methods: Verification Tests	Tuesday
Gossmann	Roseanna	94	A Simplified Human Birth Model: Translation of a Rigid Cylinder Through a Passive Elastic Tube	Tuesday
Gounley	John	55	Validation of Large Fluid Dynamic Simulations of Complex Geometries with 3D Printing	Tuesday
Graf	Jonathan	145	Minisymposium: Performance Analysis and Numerical Method Tuning for a System of Non-Linear Time-Dependent Advection-Diffusion-Reaction Equations	Tuesday
Gross	Ben	156	Minisymposium: Numerical Exterior Calculus Methods for Fluctuating Hydrodynamics Within Curved Fluid Interfaces	Tuesday
Grunert	Dennis	56	New Clustering Algorithms to Identify Nonlinear Behavior During a Car Crash Simulation	Tuesday
Güçlü	Yaman	138	Minisymposium: Semi-Lagrangian Solution of the Gyrokinetic Vlasov Equation: Field-Aligned Interpolation And Splitting in Complex Geometry	Tuesday
Guo	Mengwu	21	A Generalized Constitutive Relation Error	Tuesday
Guo	Ruchi	22	Nonconforming Immersed Finite Element Spaces For Elliptic Interface Problems	Tuesday
Haber	Eldad	E8	JInv - A Flexible Julia Package for Parallel PDE Parameter Estimation	Tuesday
Hart	Joseph	214	Efficient Computation of Sobol' Indices for Stochastic Models	Tuesday
Hasbestan	Jaber	89	Design of a Parallel AMR Infrastructure for Multi-Accelerator Computing	Wednesday
Heister	Timo	115	Minisymposium: Regression and Performance Testing and Continuous Integration for Scientific Codes	Wednesday
Heroux	Michael	116	Minisymposium: (CSE) Complete: R & D for Productivity Improvement	Wednesday
Hock	Margaret	91	Locally Adaptive Discriminant Analysis	Tuesday
Hoffman	Johan	117	Minisymposium: HPC Software Productivity Based on High-Level Abstraction in FEniCS	Wednesday
Hokanson	Jeffrey	98	Ridge Approximation Using Variable Projection	Wednesday
Humphrey	Alan	118	Minisymposium: Improving Software Productivity of Uintah Through Task-Based Architectures, Performance Portability Libraries and Modern C++ Features	Wednesday
Ibanez	Dan	119	Minisymposium: CSE Software Maintenance and Automation: Beyond Testing	Wednesday
Issac	Tobin	120	Minisymposium: The Impact of Structured AMR Representation on Software Design	Wednesday
Jacangelo	John	4	Galerkin Differences: Very High-Order Accurate and Energy Stable PDE Discretizations	Tuesday
Jadamec	Margarete	121	Minisymposium: SlabGenerator: Improving Productivity for Subduction Modeling	Wednesday
Jiang	Jiahua	E13	Offline-Enhanced Reduced Basis Method Through Adaptive Construction of the Surrogate Parameter Domain	Tuesday
Jiang	Yan	23	A Weno-Based Method of Lines Transpose Approach for Vlasov Simulations	Tuesday
Jo	Young Hyun	215	Simulation of Capacitively Coupled Plasmas using a High Performance Parallelized Particle-in-Cell Simulation	Wednesday
Johansson	August	47	MultiMesh: Fem on Arbitrarily Many Intersecting Meshes	Tuesday
Kempf	Dominic	122	Minisymposium: System Testing for PDE Frameworks - Tools and Experiences	Wednesday
Ketcheson	David	E15	Minisymposium: Solitary Waves and Shock Waves in Periodic and Random Media	Tuesday
Kim	Jihwan	95	Finite Volume Methods for Visco-Plastic Flow and Dispersive Waves	Tuesday
Kloefkorn	Tyler	165	Minisymposium: Trimmed Serendipity Finite Elements	Tuesday
Koellermeier	Julian	191	Simulation of Rarefied Gases Using Hyperbolic Moment Models	Tuesday
Kosianka	Justyna	79	Condition Assessment and Prognosis Using Fluid-Structure Interaction Model Updating Within a Stochastic Inversion Framework	Tuesday
Kowalski	Julia	192	Melting-Refreezing Cycles of Sea Water Ice – An Enthalpy-Based Fixed Grid Approach	Tuesday

SIAM

Last Name	First Name	Poster #	Poster Title	Day
Kupis	Shyla	104	Resolution Analysis of Pod-Based Imaging Using Tikhonov Regularized Geophysical Inversion	Tuesday
Lai	Ming-Jun	166	Minisymposium: A Progress Report on Construction of Smooth Generalized Barycentric Coordinates	Tuesday
Lam	Remi	82	Bayesian Optimization with a Finite Budget: An Approximate Dynamic Programming Approach	Tuesday
Lambers	James	E1	Scalable Time-Stepping for PDEs Through Componentwise Approximation of Matrix Functions	Tuesday
Lange	Michael	123	Minisymposium: Devito: Towards An Efficient and Sustainable Finite Difference DSL	Wednesday
Latre	Jean-Baptiste	193	Alternative Algebraic Structures for Modelling and Computation	Tuesday
Lay	Jj	80	Stochastic Simulation of Multilevel Monte Carlo on Multi-GPU Systems	Tuesday
Lederman	Carl	24	Computing Particle Trajectories with Full Phase Information in a Magnetic Field by a Multiscale Hybridization Technique Derived from Time-Parallel Computing Methodology	Tuesday
Lee	Hee Sun	157	Minisymposium: Computing the Non-Markovian Coarse-Grained Interactions Derived from the Mori-Zwanzig Formalism in Molecular Systems: Application to Polymer Melts	Tuesday
Lei	Huan	158	Minisymposium: Quantifying Quasi-Equilibrium and Non-Equilibrium Properties of Biomolecule System	Tuesday
Leiter	Kenneth	57	Acceleration of a Multiscale Model of An Energetic Material Through Speculative Computation	Tuesday
Leoni	Massimiliano	E2	Adaptive Turbulence Simulations with Moving Domains and Multi-Phase Flow, with Applications in Biomechanics and Renewable Energy	Tuesday
LeVeque	Randall	149	Minisymposium: Simulations of Asteroid-Generated Tsunamis Using GeoClaw	Tuesday
Leyffer	Sven	E10	Mixed-Integer PDE-Constrained Optimization	Tuesday
Li	Xiaoye Sherry	E9	Factorization Based Sparse Solvers and Preconditioners -- Recent Developments for Superlu and Strumpack	Tuesday
Li	Jing-Rebecca	E14	SpinDoctor: A Simulation Tool for Diffusion MRI	Tuesday
Li	Jiajia	68	Nonnegative Sparse Tensor Decomposition on Distributed Memory Systems	Tuesday
Li	Zhen	159	Minisymposium: Mesoscopic Modeling, Concurrent Coupling and Multiscale Framework	Tuesday
Li	Jing	160	Minisymposium: Mesh Refinement and Model Reduction: Two Sides of the Same Problem	Tuesday
Li	Jing-Rebecca	194	Diffusion Mri in the Aplysia Neuronal Network: Experiments and Numerical Simulations	Tuesday
Lin	Yolanda	195	Convergence Study for Stochastic Inversion Framework to Monitor Evolving Surface Ship Mass Properties During Arctic Operations	Tuesday
Lin	Youzuo	197	A Real-Time Automatic Characterization of Fractures in Enhanced Geothermal Systems Using Machine-Learning Technique	Tuesday
Linares-Pérez	Eduardo	216	A Single-Phase Slightly Compressible Flow and Multicomponent Transport Model in Porous Media at Laboratory Scale	Wednesday
Linebarger	Erin	E16	Physically Constrained Kalman Filter	Tuesday
Lischke	Anna	18	A Tunably-Accurate Spectral Method with Linear Complexity for Multi-Term Fractional Differential Equations on the Half Line	Wednesday
Litvinenko	Alexander	13	Likelihood Approximation with Hierarchical Matrices for Large Spatial Datasets)	Wednesday
Loeb	Andrew	217	An Assembly-Free Heterogeneous Computing Method for Simulation of Heat Conduction in Heterogeneous Materials	Wednesday
Mahadevan	Vijay	124	Minisymposium: Lessons Learned from Integrating Scientific Libraries Within a Plugin-Based Architecture	Wednesday
Mandli	Kyle	150	Minisymposium: Embedding Protective Mechanisms in Coastal Flooding Simulations	Tuesday
Manzini	Gianmarco	139	Minisymposium: Spectral Based-Discontinuous Galerkin Discretizations of the Vlasov-Poisson System	Tuesday
Markidis	Stefano	140	Minisymposium: Large-Scale Implicit Particle-in-Cell Simulations of Magnetospheres with iPIC3D	Tuesday
Mattioli	Leandro	102	Coins Classification Using Image Processing and Linear Vector Quantization	Wednesday
McGregor	Duncan	25	Low Dispersion Mimetic Discretizations of Maxwell's Equations in Media with Linear Constitutive Laws	Wednesday
McInnes	Lois Curfman	125	Minisymposium: xSDK: Working toward a Community CSE Software Ecosystem	Wednesday
Mckenna	Joseph	99	Markov Chain Monte Carlo Optimization for Fitting Excitable Cells Current-Voltage Relations to Voltage Clamp Data	Wednesday
Mendez	Julio	201	Evaluation of An Improved Numerical Technique for Solving the Hypersonic Boundary Layer/Shockwave Interaction Problem	Wednesday
Menhorn	Friedrich	228	Adaptive Sparse Grid Stochastic Collocation for Random Ordinary Differential Equations	Wednesday
Miller	David	63	\$\$\$ Bugs on a Surface	Wednesday
Mills	Richard	77	Experiences, Optimizations, and Future Directions with Petsc on the 2nd Generation ("Knights Landing") Intel Xeon Phi Processor	Wednesday

SIAM

Last Name	First Name	Poster #	Poster Title	Day
Morgan	Hannah	15	Towards the Ultimate Finite Element Method for the Stokes Equations	Wednesday
Morse	Matthew	85	Efficient and General Parallel Solver for Boundary Integral Equations	Wednesday
Moulton	David	126	Minisymposium: Accelerating Application Software Development Through Software Productivity and Sustainability Plans (PSPs)	Wednesday
Myers	Aaron	127	Minisymposium: World SpatioTemporal Analytics and Mapping Project (WSTAMP): Cloud Implementation of Open Source Algorithms and Data Stores for Sustainable, Scalable Analysis of Space-Time Data	Wednesday
Nagler	Robert	128	Minisymposium: Sirepo: An Open Source Platform for Portable Reproducible Simulations	Wednesday
Natale	Andrea	26	Multiscale Energy-Conserving Finite Elements for Atmospheric Flows	Wednesday
Nathan	Eisha	27	Numerical Approximations to Katz Centrality	Wednesday
Neilan	Michael	167	Minisymposium: Divergence-Free Stokes Elements on Quadrilateral Meshes	Tuesday
Ngoma	Sedar	16	On An Inverse Diffusion Coefficient Problem Arising in Geochronology	Wednesday
Niemeyer	Kyle	129	Minisymposium: The Journal of Open Source Software	Wednesday
Niemeyer	Kyle	130	Minisymposium: Software Citation Principles for Credit and Reuse	Wednesday
Obuse	Kiori	202	An Effect of Turbulence on Zonal Jet Flows in Forced 2D and Quasi-Geostrophic Shallow Water Models on a Beta Plane	Wednesday
O'Leary-Roseberry	Tom	100	An Adjoint Capable Solver for the Stefan Problem	Wednesday
Olson	Luke	131	Minisymposium: Developing Fast Code Through High-Level Annotations	Wednesday
Osia	Uchenna	146	Minisymposium: Coupling the Electrical Excitation and Calcium Signaling in a Heart Cell	Tuesday
Owen	George	147	Minisymposium: Performance Comparison of Intel Xeon Phi Knights Landing	Tuesday
Oxberry	Geoffrey	101	On Applying Effective Parallelization of Nonlinear Programming to Topology Optimization	Wednesday
Ozen	H. Cagan	229	Dynamical Polynomial Chaos Expansions with Applications to Long Time Evolution of SDEs and SPDEs	Wednesday
Palitta	Davide	28	On the Singular Values Decay of Solutions to a Class of Generalized Sylvester Equations and Efficient Krylov Methods	Wednesday
Paludetto Magri	Victor	86	A Scalable Linear Solver Based on the FSAI Preconditioner	Wednesday
Panneerchelvam	Premkumar	218	A Two Level Preconditioner for Helmholtz Equation in High Frequency Regime	Wednesday
Pathiravasan	Chathurangi	226	A Computational Model for Sound Source Recognition	Wednesday
Pathmanathan	Pras	219	Applicability Analysis of Validation Evidence for Biomedical Computational Models	Wednesday
Pazner	Will	29	Kronecker Product Preconditioners for Very High Order Discontinuous Galerkin Methods	Wednesday
Perego	Mauro	161	Minisymposium: A Multifidelity Approach to Effectively Compute Steady-State Flow Of Ionic Solutions	Tuesday
Perline	Kyle	90	Generating Long-Term Wind Scenarios Conditioned on Sequential Forecasts	Wednesday
Pilosov	Michael	64	Advancements in Simulation-Based Optimal Experimental Design	Wednesday
Polishchuk	Stanislav	30	Computing of the Effective Coefficients via Multiscale Discontinuous Galerkin Method	Wednesday
Pouransari	Hadi	168	Minisymposium: Fast Hierarchical Solvers for Dense Linear Systems	Tuesday
Pranjal	Pranjal	230	Balanced Iterative Solvers for Linear Systems Arising from Fem Approximation of Pdes with Random Data	Wednesday
Procopio	Kevin	58	Schur Complement Domain Decomposition for Large Scale Kinetic Transport Problems	Tuesday
Qin	Xinsheng	151	Minisymposium: Clawpack and GeoClaw - Software Developments and Applications - Numerical Prediction of Water Level and Hydrodynamic Loads in Coastal Communities During a 500-Year Csz Tsunami	Tuesday
Qu	Zhuolin	213	Modeling the Mitigation of Zika and Chikungunya by Infecting Mosquitoes with Wolbachia Bacteria	Wednesday
Ragan-Kelley	Min	132	Minisymposium: Jupyter Notebooks Facilitating Productivity, Sustainability, and Accessibility of Data Science	Wednesday
Ramanan	Paritosh	74	Decentralized Framework for Sensor-Driven Optimization in Power Systems	Wednesday
Rao	Pooja	203	Stochastic Analysis of Turbulent Mix	Wednesday
Redfearn	Lee	231	Estimating the Uncertainty of Imprecise Computer Models Using Optimization Methods	Wednesday
Riazi	Sara	133	Minisymposium: GraphFlow: Workflow-Based Big Data Processing	Wednesday

SIAM

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Richardson	C	76	Containers for Scientific Computing: From Laptop to HPC	Wednesday
Romano-Pérez	Carlos	220	A Finite Element Discrete Fracture Model to Simulate Fluid Flow Through Fractured Porous Media	Wednesday
Roytershteyn	Vadim	141	Minisymposium: Kinetic Simulations of Astrophysical Plasma Turbulence	Tuesday
Saleh	Bassel	232	Neural Networks As Reduced Models for Physical Systems and Inverse Problems	Wednesday
Samyono	Widodo	233	Uncertainties in An Inverse Source Problem for Pde-Constrained Optimization with Inequality Constraints	Wednesday
Sarbu	Paul Cristian	234	Adaptive Sparse Grids Interpolation Techniques for Multilevel Stochastic Collocation in Fluid-Structure Interaction Problems	Wednesday
Sariaydin	Selin	E3	Computing Reduced Order Models Using Randomization	Tuesday
Saye	Robert	65	Implicit Mesh Discontinuous Galerkin Methods and Interfacial Gauge Methods for High-Order Accurate Interface Dynamics, with Applications to Surface Tension Dynamics, Rigid Body Fluid-Structure Interaction, and Free Surface Flow	Wednesday
Schieber	Matthew	209	Optimizing and Vectorizing Rank Reduction Techniques in Quantum Chemistry	Wednesday
Schüller	Kai	221	Moving Objects Through Phase Change Material - a Hybrid Modeling Approach	Wednesday
Serino	Daniel	37	A Stable Added-Mass Partitioned (AMP) Algorithm for Elastic Solids and Incompressible Flows	Wednesday
Shao	Meiyue	14	A Structure Preserving Lanczos Algorithm for Computing the Optical Absorption Spectrum	Wednesday
Shen	Boqian	38	A Particle-Based Numerical Method for Solving Vlasov Models in Plasma Simulations	Wednesday
Shields	Sidney	39	A Weak Galerkin (WG) Method for Maxwell's Equations in the Time Domain	Wednesday
Shields	Sidney	40	Corrugated Coaxial Cable Modeling with a Nodal Discontinuous Galerkin (NDG) Method	Wednesday
Shin	Minwoo	41	Positivity-Preserving Limiters for the Piecewise- \mathcal{P}_N Equations	Wednesday
Shukla	Khemraj	17	Numerical Simulation of Poroelastic Wave Equation with Discontinuous Galerkin Using Upwind and Modified Penalty Flux	Wednesday
Smith	Cameron	87	Fast Dynamic Load Balancing Tools for Extreme Scale Systems	Wednesday
Sockwell	Chad	210	Conservation Properties and Performance of Exponential Integrators for Nonlinear Conservation Laws	Wednesday
Sood	Kanika	134	Minisymposium: Maximizing Usability and Performance in Numerical Software Packages	Wednesday
Sousa	Eder	222	Apollo: An Unstructured Framework for Multi-Fluid Plasma Modeling	Wednesday
Southworth	Ben	42	Adaptive Smoothed Aggregation Episode II: Return of the Bad Guys	Wednesday
Srinivasan	Sriram	88	Graph Sparsification Approach for Updating Dynamic Networks on Shared Memory Systems	Wednesday
Subramaniam	Vivek	223	A Plasma-Vacuum Interface Tracking Algorithm for Fully-Implicit Magnetohydrodynamic Simulations	Wednesday
Sui	Yi	235	High-Dimensional Function Interpolation with Gradient-Enhanced Weighted ℓ^1 Minimization	Wednesday
Talbot	Charles	97	A Stochastic Permeability Model for Reduced Order Simulation and Representative Volume Element Prediction	Wednesday
Taneja	Ankur	E12	A Fully-Coupled Discontinuous Galerkin Spectral Element Method for Two-Phase Flow in Petroleum Reservoirs	Tuesday
Tang	Yu-Hang	66	Mesoscopic and High Performance Modeling of Biomimetic Polymers	Wednesday
Tang	Hui	152	Minisymposium: A Combined Model for Sediment Transport In Coastal Hazard Events (GeoClaw-Striche): Theoretical Formulation and Validation	Tuesday
Tang	Hansong	211	Simulation of Coastal Flows and Waves by Integration of Geophysical Fluid Dynamics and Fully 3D Fluid Dynamics Models	Wednesday
Teal	Tracy	135	Minisymposium: Numfocus Sustainability Project	Wednesday
TenBarge	Jason	142	Minisymposium: Eulerian Algorithms for the Discretization of Plasma Kinetic Equations	Tuesday
Trask	Nathaniel	169	Minisymposium: Particle Methods for the Mesoscale	Tuesday
Turcksin	Bruno	31	A New Goal-Oriented A Posteriori Error Estimation for 2D and 3D Saddle Point Problems in \mathcal{H}^1 Adaptive Fem	Tuesday
Udechukwu	Kennedy	225	Computation of Electromagnetic Fields Due to Dipoles in Two and Three Layered Media in \mathbb{R}^3	Wednesday
Varduhn	Vasco	E7	Exahype - An Exascale Engine for Solving Hyperbolic PDEs: Various Equations and Quick Adaption to the Users' Needs Becoming Open Source	Tuesday
Vaughan	Courtenay	78	Evaluating Production Engineering Application Performance on the Intel Knights Landing Many Core Processor	Wednesday
Vo	Huy	49	Quantized Tensor Train and Uniformization Approach for Stochastic Chemical Kinetics	Wednesday
Vogl	Chris	153	Minisymposium: Seismic Modeling to Improve Tsunami Prediction in Geoclaw	Tuesday

SIAM

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Wang	Jilu	50	Sharp Convergence Rates of Numerical Solutions of Stochastic Fractional Equations Driven by White Noise	Wednesday
Wang	Dali	136	Minisymposium: Practical Approaches to Improve Program Understanding and Software Productivity of Scientific Code	Wednesday
Wang	Jianxun	204	Improving RANS Predictive Capability Based on Machine Learning	Wednesday
Wilber	Heather	51	Numerical Computing with Functions in Polar and Spherical Geometries	Wednesday
Winkelmann	Jan	E4	Optimized Least-Squares Rational Filters for Interior Eigenvalue Problems	Tuesday
Wolfson-Pou	Jordi	75	Reducing Communication in Distributed Asynchronous Iterative Methods	Wednesday
Woodward	Carol	137	Minisymposium: Software Productivity Strategies for the Sundials Suite of Time Integrators and Nonlinear Solvers	Wednesday
Wu	Jinlong	227	Representation of Discrepancies Between Stress Tensors and Its Application in Data-Driven Turbulence Modeling	Wednesday
Xiao	Heng	236	Model Discrepancy for Simulating Complex Physical Systems: From Data Assimilation to Machine Learning	Wednesday
Xing	Xin	52	Analysis of a Preconditioner for Matrices with Block Low-Rank Structure	Wednesday
Yan	Jianfeng	224	Interior Penalties for Summation-by-Parts Discretizations of Linear Second-Order Differential Equations	Wednesday
Yang	Yunan	105	Application of Optimal Transport and the Quadratic Wasserstein Metric to Full-Waveform Inversion	Tuesday
Yang	Xiu	170	Minisymposium: Effect of Uncertainties in Radii and Atomic Charges on the Solvation Calculations	Tuesday
Zhang	Jiaqi	53	An Ale-Level-Set Method for Moving Boundary Problems	Wednesday
Zhang	Xiangxiong	54	Positivity-Preserving High Order Discontinuous Galerkin Schemes for Compressible Navier-Stokes	Wednesday
Zhang	Zhongqiang	61	1D Diffusion with Fractional Laplacian: Regularity and Numerical Methods	Wednesday
Zhao	Xueping	212	Computational Methods to Study the Pattern Formation in Tissues	Wednesday
Zhu	Hongyu	73	A Semismooth Newton Method for the Solution of a Thermomechanically Coupled Stokes Ice Sheet Model	Wednesday