

Family Name	Given Name	Presentation Title	Session	Code
Falletta	Silvia	Analysis of the Mortar Method with Approximate Integration	Formulations1	C1
Le Borne	Sabine	Hierarchical Matrix Preconditioners	Formulations1	C1
Pavarino	Luca	Domain Decomposition Preconditioners for Fekete and Gauss-Lobatto Spectral Elements	Formulations1	C1
Pennacchio	Micol	Substructuring Preconditioners for High-order Mortar Methods	Formulations1	C1
Wang	Kening	Two-level Additive Schwarz Preconditioners for C0 Interior Penalty Methods	Formulations1	C1
Acebron	Juan	Domain Decomposition Solution of Elliptic Boundary Value Problems via Monte Carlo and Quasi-Monte Carlo Methods	Formulations2	C10
Bertoluzza	Silvia	The Fully Discrete Fat Boundary Method: Optimal Error Estimates	Formulations2	C10
Pacull	Francois	A Numerical Experimental Study of the Immersed Boundary Method	Formulations2	C10
Roman	Luis	Galerkin Approximation of An Elliptic Stochastic PDE Using A White Noise Approach	Formulations2	C10
Versieux	Henrique	Homogenization Finite Element Methods	Formulations2	C10
Kulkarni	Deepak	A Discontinuous Galerkin Formulation for Solution of Parabolic Equations on Nonconforming Meshes	Parabolic	C11
Ltaief	Hatem	Fault Tolerant DD for Parabolic Problems	Parabolic	C11
Minero	Remo	Local Defect Correction for Time-dependent Partial Differential Equations	Parabolic	C11
Portero	Laura	Embedded Pairs of Fractional Step Runge-Kutta Methods and Improved Domain Decomposition Techniques for Parabolic Problems	Parabolic	C11
Tromeur-Dervout	Damien	Adaptive Parareal for Systems of ODEs	Parabolic	C11
Garbey	Marc	Analysis of Infrared Images	Applications2	C12
Lai	Choi-Hong	On a Parallel Time-domain Method for the Nonlinear Black-Scholes	Applications2	C12
Marzouk	Youssef	K-means Clustering for Optimal Partitioning of Parallel Hierarchical N-body Simulations	Applications2	C12
Richardson	Casey	The Vese-Chan Algorithms Revisited: A Level Set Method for Image Segmentation and Fracture	Applications2	C12
Schaefer	Christian	Numerical Discretization for Relative Permeability Hysteresis	Applications2	C12
Berninger	Heiko	On Nonlinear Domain Decomposition Methods for Jumping Nonlinearities	Heterogeneities	C2
Cho	Sungmin	Domain Decomposition Preconditioning for Elliptic Problems with Jumps in Coefficients	Heterogeneities	C2
Discacciati	Marco	Mathematical and Numerical Methods for the Coupling of Navier-Stokes and Darcy Equations	Heterogeneities	C2
Fontvieille	Franck	An efficient Finite Element Method for Some Non-matching Dimension Problems	Heterogeneities	C2
Lechner	Patrick	Domain Decomposition for Heterogeneous Media	Heterogeneities	C2
Anthonissen	Martijn	Convergence Analysis of the Local Defect Correction Method for 2D Convection-diffusion Equations	Flows	C3
Kanayama	Hiroshi	Stationary Incompressible Viscous Flow Analysis by a Domain Decomposition Method	Flows	C3
Kang	Kab Seok	New stream function approach method for Magnetohydrodynamics	Flows	C3
Lin	Paul	Performance of Multilevel Domain Decomposition Preconditioners for Finite Element Transport/Reaction Systems	Flows	C3
Sala	Marzio	Algebraic Preconditioners for Nonsymmetric PDEs	Flows	C3
Barbateu	Mikael	Construction of the Balancing Domain Decomposition Preconditioner for Nonlinear Elastodynamic Problems	Balancing & FE	C4
Dey	Saikat	hp-finite/infinite Element-based Solution of 3D Acoustic Problems Using Augmented FETI-DP	Balancing & FE	C4
Lee	Chang-Ock	Preconditioners for the Dual-primal FETI Methods on Nonmatching Grids	Balancing & FE	C4
Stefanica	Dan	A Balancing Algorithm for Mortar Finite Elements	Balancing & FE	C4
Vondrak	Vit	FETI Domain Decomposition Method to Solution of Contact Problems	Balancing & FE	C4
Huelsemann	Frank	Aitken-Schwarz Acceleration on Locally Refined Grids	Adaptive & High	C5
Khatti	Sanjay	An Algorithm for Adaptive Refinement and Finite Volume Methods	Adaptive & High	C5
Mundani	Ralf-Peter	Extending the p-Version of Finite Elements by an Octree-Based Hierarchy	Adaptive & High	C5
Pernice	Michael	Solution of a Streamfunction-Vorticity Formulation of Resistive Magnetohydrodynamics using Implicit Adaptive Mesh Refinement	Adaptive & High	C5
Staff	Ornulf	Parallel Adaptive Mesh Refinement on Distributed Memory Architectures	Adaptive & High	C5
Fabris	Drazen	A Cousin Formulation for Overlapped Domain Decomposition Applied to the Poisson Equation	Elliptic	C6
Kaushik	Dinesh	Domain Decomposition Methods in Radiation Transport	Elliptic	C6
Lashuk	Ilya	Preconditioned Eigensolvers in Hypr and PETSc	Elliptic	C6
Paraschivoiu	Marius	Faster Calculations of Implicit A Posteriori Bounds to Outputs of the 3D Steady Incompressible Navier-Stokes and Energy Equations	Elliptic	C6
Picard	Christophe	A Least Square Extrapolation Method for Least Square Extrapolation Method for Heat Transfer	Elliptic	C6
Adams	Mark	Ultrascaleable Algebraic Multigrid Methods with Applications to Whole Bone Micro-Mechanics Problems	Multigrid	C7
Brannick	James	Adaptive Algebraic Multigrid Methods in Quantum Chromodynamics	Multigrid	C7
Brower	Richard	Schwarz Methods in Quantum Chromodynamics	Multigrid	C7
Vassilevski	Panayot	Recent Advanced in Algebraic Multigrid Methods	Multigrid	C7
Xu	Xuejun	Cascadic Multigrid for Finite Volume Methods for Elliptic Problems	Multigrid	C7

Aitbayev	Rakhim	Convergence Analysis and Multilevel Preconditioners for a Quadrature Galerkin Approximation of a Biharmonic Problem	Fourth-order & E C8
Hanisch	Mark	Two-level Additive Schwarz Preconditioners for Fourth-Order Mixed Methods	Fourth-order & E C8
Marcinkowski	Leszek	Additive Schwarz Method for Mortar Nonconforming Discretization of a 4th-order Elliptic Problem in 2D	Fourth-order & E C8
Patra	Abani	Preconditioners and Solvers for Adaptive hp Approximations of the Equations of Elasticity	Fourth-order & E C8
Wang	Yanqiu	An Overlapping Schwarz Preconditioner for the Mixed Formulation of Linear Plane Elasticity	Fourth-order & E C8
Bacuta	Constantin	Partition of Unity Method on Nonmatching Grids for the Stokes Equations	Applications1 C9
Jiang	Bin	Numerical Simulation of Seepage Through a Dam with Toe Drain on Non-matching Grids	Applications1 C9
Kucera	Radek	An Algorithm for Solving 3D Contact Problems with Friction	Applications1 C9
Suzuki	Atsushi	An Iterative Substructuring Method for the Stokes Problem and its Application to Earth's Mantle Convection	Applications1 C9
Toivanen	Jari	Fictitious Domain Methods for Acoustic Scattering by Objects in Sediment	Applications1 C9
Quareroni	Alfio	Interface Operators, Domain Decomposition and Applications	Plenary I1
Lehoucq	Richard	Multilevel Methods for Eigenspace Computations in Structural Dynamics	Plenary I10
Toselli	Andrea	Dual-primal FETI Algorithms for Edge Element Approximations in Three Dimensions	Plenary I11
Zikatanov	Ludmil	Subspace Correction Methods: Theory and the Construction of Robust Algebraic Multigrid Methods	Plenary I12
Zou	Jun	Non-overlapping Domain Decomposition Methods for Three-dimensional Maxwell Systems	Plenary I13
Kornhuber	Ralf	On Robust Multigrid for Phase Field Equations	Plenary I14
Brenner	Susan	Lower Bounds in Domain Decomposition	Plenary I2
Wohlmuth	Barbara	Nonoverlapping and Overlapping Domain Decomposition Applied to Coupled Structures	Plenary I3
Saad	Yousef	Domain Decomposition from an Algebraic Viewpoint: the Power of Schur Complements	Plenary I4
Rappaz	Jacques	Finite Element Method with Patches and Applications	Plenary I5
Bank	Randolph	A Domain Decomposition Solver for a Parallel Adaptive Meshing Paradigm	Plenary I6
Nataf	Frederic	Optimized Schwarz Methods for Problems with Anisotropic and Discontinuous Coefficients	Plenary I7
Dohrmann	Clark	Preconditioning of Saddle Point Systems by Substructuring and a Penalty Approach	Plenary I8
Schoeberl	Joachim	Additive Schwarz Methods for p and hp-version Finite Elements	Plenary I9
Biros	George	A Survey of Multilevel and Domain Decomposition Preconditioners for Inverse Problems in Time-dependent Advection-diffusion Equations	PDE Constraine M1
Borzi	Alfio	On a Globalization Strategy for the Multigrid Solution of Optimal Control Problems	PDE Constraine M1
Hoppe	Ronald	Structural Optimization in Materials Science	PDE Constraine M1
Prudencio	Ernesto	A Lagrange-Newton-Krylov-Schwarz Method and Applications in Boundary Control Problems	PDE Constraine M1
Dolean	Victorita	An Optimized Schwarz Algorithm for the Compressible Euler Equations	Optimized Schw M2
Dubois	Olivier	Overlapping and Nonoverlapping Optimized Schwarz Methods for the Advection-Diffusion Equation	Optimized Schw M2
Gerardo-Giorda	Luca	Algebraic Optimization of Interface Conditions in Schwarz Methods for Unsymmetric Problems	Optimized Schw M2
Japhet	Caroline	A New Cement to Glue Nonconforming Grids with Robin Interface Conditions in the Finite Element Case	Optimized Schw M2
Kimm	Jung-Han	A Robin Interface Condition for an Overlapping Schwarz Algorithm	Optimized Schw M2
Laayouni	Lahcen	Optimized Schwarz Methods in Spherical Geometry with an Overset Grid System	Optimized Schw M2
Loisel	Sebastian	TBA	Optimized Schw M2
Schaedle	Achim	Schwarz Methods for Helmholtz Scattering Problems Using the PML Method at Interfaces	Optimized Schw M2
St-Cyr	Amik	Optimized RAS Preconditioning	Optimized Schw M2
Vouvakis	Marinos	A Nonoverlapping Schwarz Method for Time-Harmonic Maxwell Problems	Optimized Schw M2
Dostal	Zdenek	Optimal FETI-DP for Variational Inequalities	DDM applied to M3
Feyel	Frederic	Two Applications of Domain Decomposition Methods for Computational Mechanics	DDM applied to M3
Lesionne	Michel	Accelerating Contact Area Detection in FETI-DPC Methods	DDM applied to M3
Martin	Veronique	Optimized Algorithms for the Coupling of Convection and Convection-Diffusion Problems	DDM applied to M3
Rapin	Gerd	A New Domain Decomposition Method for the Stokes Equations	DDM applied to M3
Reese	Garth	Salinas: Scalability, Performance and Robustness in a Production-level Finite Element Application	DDM applied to M3
Rixen	Daniel	Primal and Dual Schur Complement Solvers for Engineering Problems: a Family Picture	DDM applied to M3
Ryan	Juliet	Adaptive Mesh Refinement : Application to a Planar Shock Interacting with a Circular Diffusion H2-air Flame	DDM applied to M3
Vidrascu	Marina	A Newton-Krylov Preconditioner for Fluid-structure Problems in Blood Flows	DDM applied to M3
Yang	Chao	Algebraic Sub-structuring for Large-scale Electromagnetic Applications	DDM applied to M3
Cendes	Zoltan	Domain Decomposition via Transfinite Elements and Mode Matching	Computational E M4
Coyle	Joseph	Conditioning of Matrices for the p-version Finite Element Approximation of the Space $H(\text{curl})$	Computational E M4
DeGersem	Herbert	Iterative Substructuring for Finite Element Electrical Machine Simulation	Computational E M4

Hoppe	Ronald	Error Reduction in Adaptive Mortar Edge Element Methods	Computational E M4
Kindt	Rick	A Nontraditional Decomposition Approach to Translation Symmetry Problems in Electromagnetics	Computational E M4
Monk	Peter	The Ultra Weak Variational Formulation of Maxwell's Equations	Computational E M4
Sun	Din-Kow	A Nonconforming, Nonoverlapping Domain Decomposition Method for the 3D Time-harmonic Maxwell Equation	Computational E M4
Vouvakis	Marinos	Nonconforming, Nonoverlapping Domain Decomposition for Large Electromagnetic Problems	Computational E M4
Zaglmayr	Sabine	ASM Preconditioning for High-order Nedelec Elements	Computational E M4
Bal	Guillaume	Some Convergence Results for the Parareal Algorithm	Space-Time Par M5
Daoud	Daoud S.	Parareal Time Discretization For an Inverse Problem of Determining a Control Function in Parabolic PDEs	Space-Time Par M5
Farhat	Charbel	A Time-Domain-Decomposed Implicit Methodology for the Time-Parallel Solution of Second-Order Hyperbolic Problems	Space-Time Par M5
Gander	Martin	New Convergence Results for the Parareal Algorithm Applied to ODEs and PDEs	Space-Time Par M5
Halpern	Laurence	Optimized Schwarz waveform Relaxation Algorithms for Convection-diffusion Problems and Best Approximation	Space-Time Par M5
Japhet	Caroline	Optimized Schwarz waveform Relaxation Algorithms with Nonconforming Time Discretization for Coupling Convection-diffusion Problems	Space-Time Par M5
Kern	Michel	A Schwarz Waveform Relaxation Method for Advection-reaction-diffusion with Discontinuous Coefficients and Non-matching Grids	Space-Time Par M5
Maday	Yvon	TBA	Space-Time Par M5
Nataf	Frederic	A Non Conforming Scheme in Time for a Finite Volume Discretization	Space-Time Par M5
Vandewalle	Stefan	The Parareal Algorithm in a Historical Perspective	Space-Time Par M5
Fischer	Paul	Weighted Schwarz Smoothers for the Spectral Element Method	Schwarz Precon M6
Hwang	Feng-Nan	Multilevel Schwarz Methods for Stokes and Navier-Stokes Equations	Schwarz Precon M6
Kimn	Jung-Han	An Overlapping Balancing Domain Decomposition Method for Elliptic PDEs	Schwarz Precon M6
Nabben	Reinhard	A Theoretical Comparison of the Deflation, the Coarse-grid Correction and the Balancing Neumann-Neumann Preconditioners	Schwarz Precon M6
Olson	Luke	Overlapping Schwarz-type Preconditioning and High-order Elements	Schwarz Precon M6
Ovtchinnikov	Serguei	Computational Experiences with Fully Coupled Implicit Methods for Various Magnetohydrodynamic Problems	Schwarz Precon M6
Sarkis	Marcus	Restricted Balancing Domain Decomposition and Restricted Coarse Problems for the Helmholtz Problem	Schwarz Precon M6
Szyld	Daniel	Remarks on Weighted Restricted Schwarz Methods	Schwarz Precon M6
Vuik	Kees	Deflation Acceleration for a Domain Decomposition Preconditioner	Schwarz Precon M6
Bavestrello	Henri	On Two Extensions of the FETI-DP Method to Constrained Linear Problems	FETI & Neuman M7
Dryja	Maksymilian	Neumann-Neumann Algorithms (2 and 3 levels) for Finite Element Elliptic Problems with Discontinuous Coefficients on Fine Triangulation	FETI & Neuman M7
Fragakis	Yannis	New Developments in the Theory and Implementation of Primal Alternatives of the FETI Methods	FETI & Neuman M7
Kim	Hyea Hyun	A FETI-DP Formulation for the Elasticity Problems with Mortar Methods	FETI & Neuman M7
Klawonn	Axel	Robust FETI-DP Methods for Elasticity	FETI & Neuman M7
Langer	Ulrich	Inexact Data-Sparse Boundary Element Tearing and Interconnecting Methods	FETI & Neuman M7
Lesionne	Michel	Application of the Primal Substructuring Method to Constrained Problems	FETI & Neuman M7
Li	Jing	A BDDC-type Algorithm for Solving Incompressible Stokes Equations	FETI & Neuman M7
Mandel	Jan	A Note on Adaptive Coarse Space Selection in BDDC and FETI-DP Iterative Substructuring Methods	FETI & Neuman M7
Pierson	Kendall	Multilevel FETI-DP Algorithms: Preliminary Results	FETI & Neuman M7
Proskurowski	Wlodek	A FETI-DP Preconditioner with Special Scaling for Mortar	FETI & Neuman M7
Rheinbach	Oliver	A Parallel Implementation of FETI-DP using Edge Constraints and Transformation of Basis for Linear Elasticity in 3D	FETI & Neuman M7
Sarkis	Marcus	Lagrange Multipliers for Coupling Stokes and Darcy Equations	FETI & Neuman M7
Sun	Jun	Applications of the FETI-DP-RBS-LNA algorithm on Large Scale Problems with Localized Nonlinearities	FETI & Neuman M7
Tu	Xuemin	Three-level BDDC in Two Dimensions	FETI & Neuman M7
Hauret	Patrice	Stabilized Discontinuous Mortar Formulations for 3D Nonlinear Elastodynamics with Industrial Applications	Mortar Elements M8
Laursen	Tod	Mortar Elements in Large Sliding Frictional Contact Analysis	Mortar Elements M8
Le Tallec	Patrick	Two-scale Dirichlet-Neumann Preconditioners for Problems with Geometric Boundary Refinements.	Mortar Elements M8
Pironneau	Olivier	Numerical Zoom and DDM	Mortar Elements M8
Rahman	Talal	Approximate Mortar Conditions for Crouzeix-Raviert FE on Non-matching Grids	Mortar Elements M8
Abdoulvaev	Gassan	Solving Optical Tomography Problem Using PDE-Constrained Optimization Method	Poster P
Dobrian	Florin	Evaluation of Parallel Implicit Methods for a Set of Model MHD Problems	Poster P
Dokeva	Nina	Parallel Implementation of a FETI-DP method for Mortar Discretization	Poster P
Emelianenko	Maria	Uniform Convergence of a Multigrid Energy-based Quantization Scheme	Poster P
Gobbert	Matthias	Parallel Simulations of a System of Reaction-Diffusion Equations Modeling Calcium Waves in a Human Heart Cell	Poster P
Horak	David	A Scalable FETI-DP Algorithm with Mortars on Contact Interface	Poster P

Keyes	David	Terascale Optimal PDE Simulations	Poster	P
Khatti	Sanjay	On Grid Generation in Complicated 3D Geological Formations and Quality Optimization	Poster	P
Krause	Rolf	Solving Frictional Contact Problems with Frictionless Speed	Poster	P
Kwak	Do-Young	Mixed Finite Elements for Quadrilateral Grids	Poster	P
Patra	Abani	Domain Decomposition Solvers for Least Square Meshfree Methods	Poster	P
Sarkis	Markus	Low-order Finite Elements for the Stokes Problem Enriched by Homogeneous Harmonic Polynomials	Poster	P
Teranishi	Keita	Parallel Preconditioning for Finite Element Analysis In Welding Models	Poster	P