



The Third Joint SIAM/CAIMS Annual Meetings

July 28–August 1, 2025

Conference on Computational Geometric Design

July 28–July 30, 2025

Conference on Control and Its Applications

July 28–July 30, 2025

Conference on Applied and Computational Discrete Algorithms

July 30–August 1, 2025

**Unless otherwise noted, all events will take place at the Montréal Convention Center:
159, rue Saint-Antoine Ouest, 9e étage, Montréal, QC, H2Z 1H2, Métro Place-d'Armes**

Attendees are encouraged to view the Online Programs:

AN25 <https://www.siam.org/conferences-events/siam-conferences/an25/program/program-abstracts/>

GD25 <https://www.siam.org/conferences-events/siam-conferences/gd25/program/program-abstracts/>

CT25 <https://www.siam.org/conferences-events/siam-conferences/ct25/program/program-abstracts/>

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3600 Market Street, 6th Floor
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Sunday, July 27

11:00 a.m. – 6:00 p.m.

CAIMS/SCMAI Board Meeting
445B

4:00 p.m. – 8:00 p.m.

Registration
517BC Foyer

5:00 p.m. – 6:00 p.m.

Student Orientation
516B

6:00 p.m. – 8:00 p.m.

Welcome Reception **held jointly with CT25 and GD25**
720/725

Monday, July 28

7:00 a.m. – 5:00 p.m.

Registration
517BC Foyer

8:00 a.m. – 10:00 a.m.

Concurrent Sessions

MS1 AWM Workshop: Science of Data and Mathematics Part I
516D**MS2** Data-Driven Approaches in Biomedical Data Analysis
513B**MS3** Quantum Linear Algebra and Quantum Algorithms Part I
518A**MS4** Recent Advances in Numerical Methods for PDEs: From High-Order Schemes to Novel Uncertainty Quantification and Optimization Methods Part I
520A**MS5** Recent Advances in Randomized Numerical Linear Algebra Part I
520B**MS6** Transforming Science with Machine Learning: Reduced-Order Models in the Digital Era Part I
520C**MS7** Computational Data Science of Nanostructures Part I
520D**MS8** Recent Advances in Multiscale Analysis, Modeling and Simulations in Materials Science Part I
520E**MS10** Recent Advances in QR Factorizations
524A**MS11** Spectra and Dynamics of Complex Materials Part I
524B

Monday, July 28

MS12 Next-Gen Advancements in Inverse Problems: Ideas and Innovations from Early-Career Researchers Part I
524C**MS13** Environmental Fluid Dynamics Part I
516E**MS14** Digital Twin: Methods and Applications Part I
513A**MS15** Recent Trends in Variational Problems Part I
523A**MS16** Structure-preserving Data-driven Dynamics and Operator Learning Part I
523B**MS56** Advances in Neural Network Methods for PDEs and Optimization Part I
520F**MS65** Advances in Deep Learning Theory Part I
522A**MS77** Mathematical Approaches to Advancing Women's Health Part I
522B**MS157** Double Descent and Related Phenomena in Modern Statistical Learning Part I
518C**CP1** Fluid Dynamics
516A**CP4** Numerical PDEs
518B**CP29** Epidemiology, Disease Modeling and Population Models
516B

9:30 a.m. – 4:30 p.m.

Exhibit Hall Open
517A

10:00 a.m. – 10:30 a.m.

Coffee Break
517A

10:30 a.m. – 10:40 a.m.

Opening Remarks
517D

10:40 a.m. – 11:25 a.m.

IP1 Science 2.0 - Evolving the Scientific Method Through Learning and Reasoning Symbiosis
Lior Horesh, IBM Research, U.S.
517D

11:40 a.m. – 12:25 p.m.

SP1 CAIMS-SCMAI Cecil Graham Doctoral Dissertation Award Lecture: Concentration Phenomena in Several Reaction-Diffusion Equations with Kinetic Effect
Fanze Kong, University of British Columbia, Canada
517C

Monday, July 28

12:25 p.m. – 1:45 p.m.

AWM Luncheon (by invitation only)
519AB

MGB-SIAM EC Fellows Luncheon (by invitation only)

Lunch Break

1:45 p.m. – 2:30 p.m.

JP1 AMS-SIAM Joint Plenary: (Machine) Learning Ocean & Climate Physics Across Scales
Laure Zanna, Courant Institute of Mathematical Sciences, New York University, U.S.
517D

2:45 p.m. – 3:30 p.m.

SP2 AWM-SIAM Sonia Kovalevsky Lecture: From Neurological Disorders to Additive Manufacturing: Integrating Isogeometric Analysis with Deep Learning and Digital Twins
Jessica Zhang, Carnegie Mellon University, U.S.
517D

3:30 p.m. – 4:00 p.m.

Coffee Break
517A

4:00 p.m. – 6:00 p.m.

Concurrent Sessions

MT1 Julia for HPC/Scientific Computing
516B**MS19** Image Analysis and Learning with Variational Models and PDEs Part I
522C**MS20** AWM Workshop: Science of Data and Mathematics Part II
516D**MS21** Research from SIAM-Simons Undergraduate Summer Research Program
513B**MS22** Quantum Linear Algebra and Quantum Algorithms Part II
518A**MS23** Recent Advances in Numerical Methods for PDEs: From High-Order Schemes to Novel Uncertainty Quantification and Optimization Methods Part II
520A**MS24** Recent Advances in Randomized Numerical Linear Algebra Part II
520B**MS25** Transforming Science with Machine Learning: Reduced-Order Models in the Digital Era Part II
520C**MS26** Computational Data Science of Nanostructures Part II
520D

Monday, July 28

MS27 Recent Advances in Multiscale Analysis, Modeling and Simulations in Materials Science Part II
520E

MS30 Spectra and Dynamics of Complex Materials Part II
524B

MS31 Next-Gen Advancements in Inverse Problems: Ideas and Innovations from Early-Career Researchers Part II
524C

MS32 Environmental Fluid Dynamics Part II
516E

MS33 Digital Twin: Methods and Applications Part II
513A

MS34 Recent Trends in Variational Problems Part II
523A

MS35 Structure-preserving Data-driven Dynamics and Operator Learning Part II
523B

MS62 Mathematical Modeling and Its Applications in Life Science and Public Health
524A

MS75 Advances in Neural Network Methods for PDEs and Optimization Part II
520F

MS83 Advances in Deep Learning Theory Part II
522A

MS96 Mathematical Approaches to Advancing Women's Health Part II
522B

MS173 Double Descent and Related Phenomena in Modern Statistical Learning Part II
518C

CP2 Epidemiology; Disease Modeling, Population Models I
516A

CP20 Partial Differential Equations and Social/Network Science
518B

5:00 p.m. – 6:00 p.m.

CAIMS/SCMAI NSERC Townhall
517C

6:15 p.m. – 6:45 p.m.

PD1 Industry Lightning Talks
517D

6:45 p.m. – 7:45 p.m.

PD2 Industry Career Panel
517D

7:45 p.m. – 9:15 p.m.

SIREV Editorial Board Meeting
Wilcom, Intercontinental Hotel

Graduate Student Reception and Industry Reception
720/725

Tuesday, July 29

7:00 a.m. – 8:00 a.m.

Student Chapter Breakfast with Leadership (by invitation only)
519AB

7:30 a.m. – 5:00 p.m.

Registration
517BC Foyer

8:00 a.m. – 10:00 a.m.

Concurrent Sessions

MS9 Stochastic Modeling in Biology: Methods and Applications Part I
522B

MS29 Advances in Modeling Cancer Progression and Treatment Part I
518C

MS38 Image Analysis and Learning with Variational Models and PDEs Part II
522C

MS39 Innovative Initiatives for Women in Mathematics
516D

MS40 Undergraduate Research using the Mathematics of Soft Target Risk Assessment
513B

MS41 Quantum Linear Algebra and Quantum Algorithms Part III
518A

MS42 Recent Advances in Numerical Methods for PDEs: From High-Order Schemes to Novel Uncertainty Quantification and Optimization Methods Part III
520A

MS43 Mathematics of Radar Imaging
520B

MS44 Modern Advances in HPC: Automating Processes, Managing Complexity, and Accelerating Simulations Part I
520C

MS45 Computational Data Science of Nanostructures Part III
520D

MS46 Recent Advances in Multiscale Analysis, Modeling and Simulations in Materials Science Part III
520E

MS49 Spectra and Dynamics of Complex Materials Part III
524B

MS50 Next-Gen Advancements in Inverse Problems: Ideas and Innovations from Early-Career Researchers Part III
524C

MS51 Environmental Fluid Dynamics Part III
516E

MS52 Digital Twin: Methods and Applications Part III
513A

MS53 Recent Trends in Variational Problems Part III
523A

Tuesday, July 29

MS54 Numerical Methods in the Theory of Orthogonal Polynomials and Special Functions
523B

MS93 Advances in Neural Network Methods for PDEs and Optimization Part III
520F

MS102 Advances in Deep Learning Theory Part III
522A

CP3 Computational Fluid Dynamics I
516A

CP22 Optimization and Optimal Control
518B

CP30 Climate
516B

9:30 a.m. – 4:30 p.m.

Exhibit Hall Open
517A

10:00 a.m. – 10:30 a.m.

Coffee Break
517A

10:30 a.m. – 11:15 a.m.

JP2 Joint Plenary with the SIAM Conference on Control and Its Applications: Stackelberg Strategies for the Control of Partial Differential Equations
Luz de Teresa, Universidad Nacional Autónoma de México, Mexico
517D

11:30 a.m. – 12:15 p.m.

IP2 Deep Unfolding Approach for Inverse Problems in Imaging : The Usecase of Limited-Angle Computed Tomography
Emilie Chouzenoux, CentraleSupélec and Université Paris-Saclay, France
517D

12:15 p.m. – 1:45 p.m.

Lunch Break

Honors and Awards Luncheon (ticketed event)
519AB

2:00 p.m. – 2:30 p.m.

SP3 W.T. and Idalia Reid Prize Lecture: Reachable Spaces for Infinite Dimensional Linear Systems
Marius Tucsnak, University of Bordeaux, France
517D

2:45 p.m. – 3:45 p.m.

SP4 John von Neumann Prize Lecture: Thirty Years of Cartesian Cut-cell Methods: Where Are We Now?
Marsha Berger, Flatiron Institute, New York University, U.S.
517D

Tuesday, July 29

3:45 p.m. – 4:00 p.m.

Coffee Break
517A

4:00 p.m. – 6:00 p.m.

Concurrent Sessions

PD3 AWM Women in Data Science Panel:
Navigating Success and Challenges
516D

MS17 New Directions in Quantitative Finance Part I:
Contingent Claims Analysis
520E

MS28 Stochastic Modeling in Biology: Methods
and Applications Part II
522B

MS48 Advances in Modeling Cancer Progression
and Treatment Part II
518C

MS57 Image Analysis and Learning with
Variational Models and PDEs Part III
522C

MS59 Evolving Mentoring Across A Career Span
516A

MS60 Undergraduate Research using the
Mathematics of Soft Target Risk Assessment
513B

MS61 Methods and Models for Numerical
Optimization in Quantum Information Sciences
518A

MS63 Mathematical Software Packages for High
Performance Computers Part I
520B

MS64 Modern Advances in HPC: Automating
Processes, Managing Complexity, and Accelerating
Simulations Part II
520C

MS66 From Discrete to Continuum Models in
Composite Materials Part I
520F

MS67 Mathematical Modeling and Analysis Tools
for Biomechanical and Biomedical Applications
Part I
524A

MS68 Forward and Inverse Problems for Waves in
Heterogeneous Media Part I
524B

MS69 Data- and Model-driven Approaches for
Inverse Problems Part I
524C

MS70 Tacit Knowledge in Stable Compressible
Flow Numerics Part I
516E

MS71 Recent Advances in Mean-Field Theories of
Biological Neural Networks
513A

MS73 Multivariate Approximation and
Orthogonality Part I
523B

MS74 Data Science and Numerical Computation
for PDEs
522A

Tuesday, July 29

CP5 Numerical Analysis

513B

CP19 Life Sciences and Medicine I
520D

CP21 Epidemiology, Disease Modeling and
Population Models II
520A

CP31 Optimization
516B

6:15 p.m. – 7:00 p.m.

SIAM Business Meeting

Complimentary beer & wine will be served All
are welcome to attend.

517C

7:00 p.m. – 8:30 p.m.

Donor Reception (invitation only)

Ravel, Intercontinental Hotel

7:30 p.m. – 8:00 p.m.

SIAG/CST Business Meeting

516C

SIAG/GD Business Meeting

521ABC

SIAG/EDI Business Meeting

516B

SIAG/OPSF Business Meeting

516A

8:00 p.m. – 10:00 p.m.

PP1 Poster Presentations and Dessert Reception

MP1 AWM Poster Session: Women in the Science
of Data and Mathematics

MP3 Mathematical Modeling of Blood Coagulation

MP4 Agricultural Path Planning, Disaster

Evacuation, and Beyond: Leveraging Algorithmic

Innovations in Optimization for the Common Good

and Environmental Sustainability

517B

Wednesday, July 30

7:30 a.m. – 5:00 p.m.

Registration

517 Foyer

8:00 a.m. – 10:00 a.m.

Concurrent Sessions

MS18 Recent Advances in Delay Differential
Equations Part I

516A

MS36 New Directions in Quantitative Finance Part
II: Computational and Data-Driven Methods for

Financial Decision-Making

520E

Wednesday, July 30

MS47 Stochastic Modeling in Biology: Methods
and Applications Part III

522B

MS76 Applied Mathematics and Data Science for
Cybersecurity

516D

MS78 Defining Skills for Undergraduate Data
Science Programs

513B

MS79 Challenges of Sampling and Data Analysis of
Disease Ecology

518A

MS80 Spectral Graph Theory, Orthogonal
Polynomials, and Quantum Computing Part I

520A

MS81 Mathematical Software Packages for High
Performance Computers Part II

520B

MS82 New Directions in Finite Element Methods
Part I

520C

MS84 From Discrete to Continuum Models in
Composite Materials Part II

520F

MS85 Mathematical Modeling and Analysis Tools
for Biomechanical and Biomedical Applications

Part II

524A

MS86 Forward and Inverse Problems for Waves in
Heterogeneous Media Part II

524B

MS87 Data- and Model-driven Approaches for
Inverse Problems Part II

524C

MS88 Tacit Knowledge in Stable Compressible
Flow Numerics Part II

516E

MS89 Role of Intrinsic Neuronal Properties in
Circuit Dynamics Part I

513A

MS90 Geometric and Computational Methods for
Studying Tipping Phenomena in Nature

523A

MS91 Multivariate Approximation and
Orthogonality Part II

523B

MS92 Recent Advances in Pattern Formation in
PDE's Part I

522A

MS94 The Mathematics of Network Science Part I
522C

MS139 Mathematics of Human Behaviour Part I
518B

CP6 Tensors

520D

CP23 Computational Fluid Dynamics

521ABC

MT3 Building Blocks of Quantum Computing
Tutorial: Implementing Quantum Gates using

Smooth Pulses with QuantumGateDesign.jl

516B

Wednesday, July 30

9:30 a.m. – 4:30 p.m.

Exhibit Hall Open

517A

10:00 a.m. – 10:30 a.m.

Coffee Break

517A

10:30 a.m. – 11:25 a.m.

JP3 Joint Plenary with the SIAM Conference on Computational Geometric Design: Geometry for Computational Design and Fabrication
Helmut Pottmann, TU Wien, Austria and KAUST, Saudi Arabia

517D

11:30 a.m. – 12:15 p.m.

SP5 CAIMS/SCMAI-Fields Industrial Mathematics Prize Lecture: Full Waveform Inversion: Mathematical Challenges, Computational Issues, and Applications

Wenyuan Liao, University of Calgary, Canada

517C

IP3 Inference of Dynamic Networks with Mathematical Modeling and Ai from Time-Series Data

Jae Kyoung Kim, Korea Advanced Institute of Science and Technology, Korea

517D

12:15 p.m. – 1:45 p.m.

Lunch Break

CAIMS/SCMAI AGM

517C

1:45 p.m. – 2:45 p.m.

SP6 Past President's Address: Solving Massive Combinatorial Optimization Problems

Sven Leyffer, Argonne National Laboratory, U.S.

517D

3:00 p.m. – 3:45 p.m.

SP7 Jerald L. Ericksen Prize Lecture: Variational Analysis of a Data-Driven Formulation of the Theory of Elasticity

Sergio Conti, Universität Bonn, Germany

517D

3:45 p.m. – 4:00 p.m.

Coffee Break

517A

4:00 p.m. – 6:00 p.m.

Concurrent Sessions

PD4 SIAM Committee on Science Policy – U.S.

Federal Research Outlook

521ABC

Wednesday, July 30

MS37 Recent Advances in Delay Differential Equations Part II

516A

MS55 New Directions in Quantitative Finance Part III: Structural Credit Risk Modelling

520E

MS95 Screening & Panel Discussion: Journey of Black Mathematicians

516B

MS97 Community Engagement in Mathematics: What? Who? How?

513B

MS98 Mechanistic Data-Driven QSP Modeling for Efficient Clinical Drug Development

518A

MS99 Spectral Graph Theory, Orthogonal Polynomials, and Quantum Computing Part II

520A

MS100 Mathematical Software Packages for High Performance Computers Part III

520B

MS101 Recent Theoretical and Computational Advances in Geometric Data Analysis

520D

MS103 From Discrete to Continuum Models in Composite Materials Part III

520F

MS104 Statistical Methods for Inference of Continuous-time Dynamical Systems

524A

MS105 Advances in Time Evolution of PDEs

524B

MS107 Recent Developments in Numerical Methods for Fluid Flow and Applications Part I

516E

MS108 Role of Intrinsic Neuronal Properties in Circuit Dynamics Part II

513A

MS109 Association Scheme, Orthogonal Polynomials, and Integrable Systems Part I

523A

MS110 Multivariate Approximation and Orthogonality - Part III

523B

MS111 Recent Advances in Pattern Formation in PDE's Part II

522A

MS112 Mathematical Analysis and Computational Modeling in Photonics Part I

522B

MS113 The Mathematics of Network Science Part II

522C

MS188 Dynamics, Networks, and Complex Systems: A Minisymposium Celebrating Diversity in Mathematics

516D

CP7 Computational Science I

520C

CP24 Fluid Dynamics

518B

Wednesday, July 30

6:15 p.m. – 7:15 p.m.

SP8 I.E. Block Community Lecture: An Unexpected Journey: from Music to Art Via Math

Timothy A. Davis, Texas A&M University, U.S.

517D

7:15 p.m. – 8:15 p.m.

Community Reception

720/725

Thursday, July 31

7:30 a.m. – 4:30 p.m.

Registration

517BC Foyer

8:00 a.m. – 10:00 a.m.

Concurrent Sessions

MS114 Celebrating Diversity in Mathematical Biology, with Applications in Medicine, Physiology, and Public Health Part I

516D

MS115 Computation of Special Functions

516A

MS116 Digital Mathematical Content on the Web Part I

513B

MS117 Hybrid Dynamical Systems, Control, and Applications (in honour of Professor Xinzhi Liu's 70th birthday) Part I

518A

MS119 High-Order Methods for Integration and PDEs with Applications Part I

520B

MS120 New Directions in Finite Element Methods Part II

520C

MS121 Mathematics of Complex Social Systems

520D

MS122 Optimal Transport in Natural and Data Sciences Part I

520E

MS123 Scalable Deep Learning Part I

520F

MS124 Innovative Approaches in Modeling and Numerical Methods for Multiscale Complex Systems Part I

524A

MS125 Mathematical Ecology Part I

524B

MS127 Recent Developments in Numerical Methods for Fluid Flow and Applications Part II

516E

MS128 Advancing Computational Frontiers: Machine Learning/Artificial Intelligence and Numerical Algorithms for Nonlinear Optimization and Differential Equations

513A

Thursday, July 31

Thursday, July 31

Thursday, July 31

MS129 Association Scheme, Orthogonal Polynomials, and Integrable Systems Part II
523A

MS130 Special Functions with Applications in Number Theory and Combinatorics
523B

MS131 Computational Applications of the Basic Theory of Tensors
522A

MS132 Mathematical Analysis and Computational Modeling in Photonics Part II
522B

MS134 Career Secrets Unveiled: Success in Applied Math
524C

MS155 Mathematics of Human Behaviour Part II
520A

MS189 SIAM Committee on Science Policy
516B

CP8 Simulation and Modeling III
522C

CP25 Machine Learning and Artificial Intelligence
521ABC

SIAM Student Paper Prize Presentations
517D

9:30 a.m. – 4:30 p.m.

Exhibit Hall Open
517A

10:00 a.m. – 10:30 a.m.

Coffee Break
517A

10:30 a.m. – 11:15 a.m.

IP4 Women in Mathematics Around the World: Strategies for Gender Equality
Marie-Francoise Roy, Université de Rennes 1, France
517D

11:30 a.m. – 12:15 p.m.

JP4 Joint Plenary with the SIAM Conference on Applied and Computational Discrete Algorithms: Setting a Course for Post-Moore Software Performance
Charles E. Leiserson, Massachusetts Institute of Technology, U.S.
517D

12:15 p.m. – 1:45 p.m.

Lunch Break

Resume-Building Workshop
Organized by the SIAM Career Opportunities Committee, the resume-building workshop will provide one-on-one mentoring tailored to positions in academia, industry, government, and non-profits. Bring your resume, CV, and/or cover letter and receive valuable feedback from our experienced mentors.
517A

1:45 p.m. – 2:30 p.m.

SP9 CAIMS/SCMAI Research Prize Lecture: We are all Different: Modeling Key Individual Differences in Physiological Systems
Anita Layton, University of Waterloo, Canada
517C

2:45 p.m. – 3:30 p.m.

SP10 SIAM Industry Prize Lecture: Bringing Medicines to Patients with Mathematical Biology
Richard Allen, Pfizer Inc., U.S.
517D

3:30 p.m. – 4:00 p.m.

Coffee Break
517A

4:00 p.m. – 6:00 p.m.

Concurrent Sessions

MT2 Recent and Upcoming Developments in Randomized Numerical Linear Algebra for Machine Learning
516B

MS133 Celebrating Diversity in Mathematical Biology, with Applications in Medicine, Physiology, and Public Health Part II
516D

MS135 Digital Mathematical Content on the Web Part II
513B

MS136 Hybrid Dynamical Systems, Control, and Applications (in honour of Professor Xinzhi Liu's 70th birthday) Part II
518A

MS137 High-Order Methods for Integration and PDEs with Applications Part II
520B

MS138 New Directions in Finite Element Methods Part III
520C

MS140 Optimal Transport in Natural and Data Sciences Part II
520E

MS141 Scalable Deep Learning Part II
520F

MS142 Innovative Approaches in Modeling and Numerical Methods for Multiscale Complex Systems Part II
524A

MS143 Mathematical Ecology Part II
524B

MS145 Numerical Methods for Wave Propagation and Interface Problems Part I
516E

MS146 Association Scheme, Orthogonal Polynomials, and Integrable Systems Part III
523A

MS147 Hypergeometric Series and Their Applications Part I
523B

MS148 Advances in Mathematical and Numerical Analysis of Partial Differential Equations for Application-Oriented Computations Part I
522A

MS171 Mathematics of Human Behaviour Part III
524C

CP9 Machine Learning and Numerical Analysis
520A

CP10 Fluid Dynamics II
513A

CP11 Numerical Methods for PDEs
522B

CP12 Simulation and Modeling
522C

CP26 Partial Differential Equations
521ABC

4:00 p.m. – 11:00 p.m.

SIAM Council Meeting
Ravel, Intercontinental Hotel

6:15 p.m. – 6:45 p.m.

SIAG/ACDA Business Meeting
519AB

6:15 p.m. – 7:45 p.m.

PD5 Career Opportunities Panel
517D

6:30 p.m. – 9:00 p.m.

CAIMS/SCMAI Awards Banquet **ticketed event**
Off-site

8:00 p.m. – 10:00 p.m.

MS190 An Applied Mathematicians' Storytelling Event
516B

Friday, August 1

7:30 a.m. – 4:00 p.m.

Registration
517BC Foyer

8:00 a.m. – 10:00 a.m.

Concurrent Sessions

MS149 Leveraging Data to Advance Equity and Inclusion in Applied Mathematics Part I
516D

MS150 ICERM-SIAM Empowering a Diverse Computational Mathematics Research Community Showcase Part I
516A

MS151 SIAM EDI Change Agents Program
513B

Friday, August 1

MS152 Modeling, Simulation, and Control of Quantum Devices Part I
518A

MS153 High-Order Methods for Integration and PDEs with Applications Part III
520B

MS156 Optimal Transport in Natural and Data Sciences Part III
520E

MS158 Applications of Dynamical Systems in Systems Biology
524A

MS159 Learning and Enhanced Sampling for Stochastic Systems Part I
524B

MS160 Dynamical Systems on Graphs Part I
524C

MS161 Numerical Methods for Wave Propagation and Interface Problems Part II
516E

MS162 Data-Driven Reduced Order Models with Applications in Inverse Problems
513A

MS163 Data Assimilation and Beyond: Parameter Estimation, Noise, and Model Error Part I
523A

MS164 Hypergeometric Series and Their Applications - Part II
523B

MS165 Advances in Mathematical and Numerical Analysis of Partial Differential Equations for Application-Oriented Computations Part II
522A

MS166 Recent Advances of Scientific Computing and Applications Part I
522B

MS185 Mathematics and its Applications in Medicine and Beyond Part I
516B

CP14 Life Sciences and Medicine
522C

CP27 Quantification of Uncertainty
520A

9:00 a.m. – 10:30 a.m.

SIAM Human Resources Committee Meeting
Watson, Intercontinental Hotel

10:00 a.m. – 10:30 a.m.

Coffee Break
517BC Foyer

10:30 a.m. – 11:15 a.m.

IP8 Information Complexity of Convex Optimization with Integer Variables
Amitabh Basu, Johns Hopkins University, U.S.
517D

Friday, August 1

11:00 a.m. – 4:00 p.m.

SIAM Financial Management Committee Meeting
Watson, Intercontinental Hotel

11:30 a.m. – 12:15 p.m.

SP11 CAIMS/SCMAI-PIMS Early Career Award Lecture: High-dimensional Optimization in Machine Learning with Applications to Scaling Limits and Compute-Optimal Neural Scaling Laws
Courtney Paquette, McGill University, Canada
517C

12:15 p.m. – 1:45 p.m.

Lunch Break

1:45 p.m. – 2:30 p.m.

IP9 To Be Announced
Laura Schulz, Argonne National Laboratory, U.S.
517D

2:45 p.m. – 3:30 p.m.

IP10 Integer Distances
David Eppstein, University of California, Irvine, U.S.
517D

3:30 p.m. – 4:00 p.m.

Coffee Break
517BC Foyer

4:00 p.m. – 6:00 p.m.

Concurrent Sessions

MS167 Leveraging Data to Advance Equity and Inclusion in Applied Mathematics Part II
516D

MS168 ICERM-SIAM Empowering a Diverse Computational Mathematics Research Community Showcase Part II
516A

MS169 Modeling, Simulation, and Control of Quantum Devices Part II
518A

MS170 Automating Scientific Discovery with Digital Twins, AI and High-Performance Computing
520B

MS174 Orthogonal Polynomials and Special Functions in Modern Applications
524A

MS175 Learning and Enhanced Sampling for Stochastic Systems Part II
524B

MS176 Dynamical Systems on Graphs Part II
524C

MS177 Numerical Methods for Wave Propagation and Interface Problems Part III
516E

MS180 Contemporary Applications of Partial Differential Equations
513E

Friday, August 1

MS181 Data Assimilation and Beyond: Parameter Estimation, Noise, and Model Error Part II
523A

MS182 Hypergeometric Series and Their Applications Part III
523B

MS183 Advances in Mathematical and Numerical Analysis of Partial Differential Equations for Application-Oriented Computations Part III
522A

MS184 Recent Advances of Scientific Computing and Applications Part II
522B

MS186 Mathematics and its Applications in Medicine and Beyond Part II
516B

MS187 Prion Diseases
520E

CP15 Machine Learning and Stochastic Processes
513B

CP17 Life Sciences and Medicine II
520C

CP18 Computational Science II
522C

CP28 Numerical Methods for PDEs II
520A

5:00 p.m. – 7:00 p.m.

Executive Session of the SIAM Board of Trustees
Wilcom, Intercontinental Hotel

Saturday, August 2

9:00 a.m. – 4:00 p.m.

SIAM Board of Trustees Meeting
Ravel, Intercontinental Hotel

Abbreviation Key

CP = Contributed Presentation Session
IP = Invited Plenary Speaker
MP = Miniposterium
MS = Minisymposium
MT = Minitutorial
PD = Panel Discussion
PP = Poster Session
SP = Special Lecture

Sunday, July 27

4:00 p.m. – 8:00 p.m.

Registration
517 Foyer

5:00 p.m. – 6:00 p.m.

Student Orientation
516B

6:00 p.m. – 8:00 p.m.

Welcome Reception **held jointly with AN25 and CT25**
720/725

Monday, July 28

7:00 a.m. – 5:00 p.m.

Registration
517 Foyer

8:00 a.m. – 10:00 a.m.

Concurrent Sessions

MS1 Isogeometric Design and Analysis - Part I of II
525A

MS2 Industrial Applications of Geometry Processing and Differential Geometry - Part I of II
525B

9:30 a.m. – 4:30 p.m.

Exhibit Hall Open
517A

10:00 a.m. – 10:30 a.m.

Coffee Break
517A

10:30 a.m. – 10:40 a.m.

Opening Remarks
521ABC

10:40 a.m. – 11:25 a.m.

IP1 Neural Surface Representations
Wenping Wang, Texas A&M University, U.S.
521ABC

11:30 a.m. – 12:15 p.m.

IP2 Skeleton-based Geometric Modeling
Géraldine Morin, University of Toulouse, France
521ABC

12:15 p.m. – 1:45 p.m.

Lunch Break

Monday, July 28

1:45 p.m. – 2:30 p.m.

SIAM/CAIMS Annual Meetings (AN25): AMS-SIAM Joint Plenary Speaker
Laure Zanna, Courant Institute of Mathematical Sciences, New York University, U.S.
517D

2:30 p.m. – 2:45 p.m.

Intermission

2:45 p.m. – 3:30 p.m.

SIAM/CAIMS Annual Meetings (AN25): AWM-SIAM Sonia Kovalevsky Lecture
Jessica Zhang, Carnegie Mellon University, U.S.
517D

3:30 p.m. – 4:00 p.m.

Coffee Break
517A

4:00 p.m. – 6:00 p.m.

Concurrent Sessions

MS3 Isogeometric Design and Analysis - Part II of II
525A

MS4 Industrial Applications of Geometry Processing and Differential Geometry - Part II of II
525B

6:00 p.m. – 6:15 p.m.

Intermission

6:15 p.m. – 6:45 p.m.

SIAM/CAIMS Annual Meetings (AN25): Industry Lightning Talks
517D

6:45 p.m. – 7:45 p.m.

SIAM/CAIMS Annual Meetings (AN25): Industry Career Panel
517D

7:45 p.m. – 9:15 p.m.

SIAM/CAIMS Annual Meetings (AN25): Graduate Student and Industry Reception
720/725

Tuesday, July 29

7:30 a.m. – 5:00 p.m.

Registration
517 Foyer

8:00 a.m. – 10:00 a.m.

Concurrent Sessions

MS5 Subdivision and Refinability
525A

CP1 Curves and Surfaces
525B

9:30 a.m. – 4:30 p.m.

Exhibit Hall Open
517A

10:00 a.m. – 10:30 a.m.

Coffee Break
517A

10:30 a.m. – 11:15 a.m.

IP3 Life After MCAD

Henry Bucklow, International TechneGroup Inc., United Kingdom
521ABC

11:15 a.m. – 11:30 a.m.

Intermission

11:30 a.m. – 12:15 p.m.

IP4 Human-Centered Geometry Processing
Alla Sheffer, University of British Columbia, Canada
521ABC

12:15 p.m. – 1:45 p.m.

Lunch Break

Honors and Awards Luncheon **ticketed event; separate fee applies**
519AB

2:00 p.m. – 2:30 p.m.

SIAM/CAIMS Annual Meetings (AN25): W. T. and Idalia Reid Prize Lecture
Marius Tucsnak, University of Bordeaux, France
517D

2:30 p.m. – 2:45 p.m.

Intermission

2:45 p.m. – 3:45 p.m.

SIAM/CAIMS Annual Meetings (AN25): John von Neumann Prize Lecture
Marsha Berger, Flatiron Institute, New York University, U.S.
517D

3:45 p.m. – 4:00 p.m.

Coffee Break
517A

Tuesday, July 29

Wednesday, July 30

Wednesday, July 30

4:00 p.m. – 6:00 p.m.
Concurrent Sessions
MS6 New Developments on Pythagorean–Hodograph Curves and Advance Curve Representations: Theory, Algorithms, and Applications
525A
MS7 Algorithms and Applications of Shape & Topological Data Analysis - Part I of III
525B

6:00 p.m. – 6:15 p.m.
Intermission

6:15 p.m. – 7:00 p.m.
SIAM/CAIMS Annual Meetings (AN25): SIAM Business Meeting **complimentary beer and wine will be served**
517C

7:00 p.m. – 7:30 p.m.
Intermission

7:30 p.m. – 8:00 p.m.
SIAG/GD Business Meeting **complimentary beer and wine will be served**
521ABC

8:00 p.m. – 10:00 p.m.
PP1 Poster Session and Dessert Reception **held jointly with AN25 and CT25**
517B

Wednesday, July 30

7:30 a.m. – 5:00 p.m.
Registration
517 Foyer

8:00 a.m. – 10:00 a.m.
Concurrent Sessions
MS8 Advances in Spline Theory: Approximation, Interpolation, and Numerical Simulation - Part I of II
525A
MS9 Algorithms and Applications of Shape & Topological Data Analysis - Part II of III
525B

9:30 a.m. – 4:30 p.m.
Exhibit Hall Open
517A

10:00 a.m. – 10:30 a.m.
Coffee Break
517A

10:30 a.m. – 10:40 a.m.
Closing Remarks
517D

10:40 a.m. – 11:25 a.m.
JP1 Joint Plenary Speaker with the SIAM/CAIMS Annual Meetings (AN25): Geometry for Computational Design and Fabrication
Helmut Pottmann, TU Wien, Austria and KAUST, Saudi Arabia
517D

11:30 a.m. – 12:15 p.m.
SP1 SIAM Activity Group on Geometric Design
Early Career Prize Lecture: Robust and Sustainable Geometry Processing
Oded Stein, University of Southern California, U.S.
521ABC

12:15 p.m. – 1:45 p.m.
Lunch Break

1:45 p.m. – 2:45 p.m.
SIAM/CAIMS Annual Meetings (AN25): Past President’s Address
Sven Leyffer, Argonne National Laboratory, U.S.
517D

2:45 p.m. – 3:00 p.m.
Intermission

3:00 p.m. – 3:45 p.m.
SIAM/CAIMS Annual Meetings (AN25): Jerald L. Ericksen Prize Lecture
Sergio Conti, Universität Bonn, Germany
517D

3:45 p.m. – 4:00 p.m.
Coffee Break
517A

4:00 p.m. – 6:00 p.m.
Concurrent Sessions
MS10 Advances in Spline Theory: Approximation, Interpolation, and Numerical Simulation - Part II of II
525A
MS11 Algorithms and Applications of Shape & Topological Data Analysis - Part III of III
525B

6:00 p.m. – 6:15 p.m.
Intermission

6:15 p.m. – 7:15 p.m.
SIAM/CAIMS Annual Meetings (AN25): I. E. Block Community Lecture
Timothy A. Davis, Texas A&M University, U.S.
517D

7:15 p.m. – 8:15 p.m.
SIAM/CAIMS Annual Meetings (AN25): Community Reception
720/725

Abbreviation Key	
CP	= Contributed Presentation Session
IP	= Invited Plenary Speaker
MS	= Minisymposium
MT	= Minitutorial
PP	= Poster Session
SP	= Special Lecture

Sunday, July 27

4:00 p.m. – 8:00 p.m.

Registration
517 Foyer

5:00 p.m. – 6:00 p.m.

Student Orientation
516B

6:00 p.m. – 8:00 p.m.

Welcome Reception **held jointly with AN25 and GD25**
720/725

Monday, July 28

7:00 a.m. – 5:00 p.m.

Registration
517 Foyer

8:00 a.m. – 10:00 a.m.

Concurrent Sessions

MS1 Data-driven Model Reduction for Control - Part I of II
513D

MS2 Recent Developments in Control and Optimization in Infinite Dimensional Systems - Part I of III
513E

MS3 Learning and Computation for Mean Field Games and Control - Part I of III
513F

MS4 Control for Hyperbolic Partial Differential Equations with Applications - Part I of III
514A

MS5 Stochastic Control Theory and Applications - Part I of III
514B

MS6 Recent Advances in Numerical Methods in Optimal Control and Applications - Part I of II
514C

MS7 Advances in Mathematical Methods for Control, Inverse Problems and Stabilization - Part I of III
515A

MS8 Recent Trends for the Control and Estimation of Freeway Traffic Systems
515B

CP1 Partial Differential Equations 1
515C

9:30 a.m. – 4:30 p.m.

Exhibit Hall Open
517A

10:00 a.m. – 10:30 a.m.

Coffee Break
517A

Monday, July 28

10:30 a.m. – 10:40 a.m.

Opening Remarks
516C

10:40 a.m. – 11:25 a.m.

IP1 Mean Field Control and Games on Large Networks
Peter E. Caines, McGill University, Canada
516C

11:30 a.m. – 11:50 a.m.

SP1 Activity Group on Control and Systems Theory
Best SICON Paper Prize Lecture #1 - Learning Stationary Nash Equilibrium Policies in N-Player Stochastic Games with Independent Chains
Rasoul Etesami, University of Illinois Urbana-Champaign, U.S.
516C

11:55 a.m. – 12:15 p.m.

SP2 Activity Group on Control and Systems Theory
Best SICON Paper Prize Lecture #2 - Integer Optimal Control with Total Variation Regularization
Paul Manns, Technische Universität Dortmund, Germany
516C

12:15 p.m. – 1:45 p.m.

Lunch Break

1:45 p.m. – 2:30 p.m.

SIAM/CAIMS Annual Meetings (AN25): AMS-SIAM Joint Plenary Speaker
Laure Zanna, Courant Institute of Mathematical Sciences, New York University, U.S.
517D

2:30 p.m. – 2:45 p.m.

Intermission

2:45 p.m. – 3:30 p.m.

SIAM/CAIMS Annual Meetings (AN25): AWM-SIAM Sonia Kovalevsky Lecture
Jessica Zhang, Carnegie Mellon University, U.S.
517D

3:30 p.m. – 4:00 p.m.

Coffee Break
517A

4:00 p.m. – 6:00 p.m.

Concurrent Sessions

MT1 Partial Differential-Algebraic Equations: Dissipativity and Controller Design
513C

MS9 Data-driven Model Reduction for Control - Part II of II
513D

Monday, July 28

MS10 Control, Stability and Applications Across Fields - Part I of III
513E

MS11 Learning and Computation for Mean Field Games and Control - Part II of III
513F

MS12 Control for Hyperbolic Partial Differential Equations with Applications - Part II of III
514A

MS13 Stochastic Control Theory and Applications - Part II of III
514B

MS14 Mathematical Perspectives on Control of Quantum Mechanical Systems - Part I of III
514C

MS15 Tensor Computations in Control Systems - Part I of II
515B

CP2 Partial Differential Equations 2
515C

6:00 p.m. – 6:15 p.m.

Intermission

6:15 p.m. – 6:45 p.m.

SIAM/CAIMS Annual Meetings (AN25): Industry Lightning Talks
517D

6:45 p.m. – 7:45 p.m.

SIAM/CAIMS Annual Meetings (AN25): Industry Career Panel
517D

7:45 p.m. – 9:15 p.m.

SIAM/CAIMS Annual Meetings (AN25): Graduate Student and Industry Reception
720/725

Tuesday, July 29

7:30 AM – 5:00 p.m.

Registration
517 Foyer

8:00 a.m. – 10:00 a.m.

Concurrent Sessions

MS16 Recent Developments in Control and Optimization in Infinite Dimensional Systems - Part II of III
513E

MS17 Learning-Based Innovations in Estimation and Control - Part I of II
513F

MS18 Control for Hyperbolic Partial Differential Equations with Applications - Part III of III
514A

Tuesday, July 29

MS19 Stochastic Control Theory and Applications - Part III of III
514B

MS20 Recent Advances in Numerical Methods in Optimal Control and Applications - Part II of II
514C

MS21 Advanced Control and Optimization for Nonlinear Systems
515A

MS22 New Results and Trends in Switched Dynamical Systems
515B

CP3 New Techniques for Control
515C

CP4 Networks
513C

9:30 a.m. – 4:30 p.m.

Exhibit Hall Open
517A

10:00 a.m. – 10:30 a.m.

Coffee Break
517A

10:30 a.m. – 11:15 a.m.

JP1 Joint Plenary Speaker with the SIAM/CAIMS Annual Meetings (AN25): Stackelberg Strategies for the Control of Partial Differential Equations
Luz de Teresa, Universidad Nacional Autonoma de Mexico, Mexico
517D

11:15 a.m. – 11:30 a.m.

Intermission

11:30 a.m. – 12:15 p.m.

SP3 Activity Group on Control and Systems Theory Prize Lecture - Bridging Physics and Data: Kernel-based Modelling of Positive Dynamical Systems
Brayan Shali, Katholieke Universiteit Leuven, Belgium
516C

12:15 p.m. – 1:45 p.m.

Lunch Break

Honors and Awards Luncheon **ticketed event; separate fee applies**
519AB

2:00 p.m. – 2:30 p.m.

SIAM/CAIMS Annual Meetings (AN25): W. T. and Idalia Reid Prize Lecture
Marius Tucsnak, University of Bordeaux, France
517D

2:30 p.m. – 2:45 p.m.

Intermission

Tuesday, July 29

2:45 p.m. – 3:45 p.m.

SIAM/CAIMS Annual Meetings (AN25): John von Neumann Prize Lecture
Marsha Berger, Flatiron Institute, New York University, U.S.
517D

3:45 p.m. – 4:00 p.m.

Coffee Break
517A

4:00 p.m. – 6:00 p.m.

Concurrent Sessions

MT2 Explicit Methods for the Control and the Estimation of Systems Modeled by Partial Differential Equations
513C

MS23 Recent Advances in Mean Field Control and Mean Field Games - Part I of III
513D

MS24 Control, Stability and Applications Across Fields - Part II of III
513E

MS25 Learning-Based Innovations in Estimation and Control - Part II of II
513F

MS26 Port-Hamiltonian Systems Modeling and Control - Part I of III
514A

MS27 Mathematical Perspectives on Control of Quantum Mechanical Systems - Part II of III
514C

MS28 Advances in Mathematical Methods for Control, Inverse Problems and Stabilization - Part II of III
515A

MS29 Stochastic Dynamical Systems: Optimal Control, Analysis, Algorithms, and Applications - Part I of II
515B

CP5 Stochastic Control
515C

6:00 p.m. – 6:15 p.m.

Intermission

6:15 p.m. – 7:00 p.m.

SIAM/CAIMS Annual Meetings (AN25): SIAM Business Meeting **complimentary beer and wine will be served**
517C

7:00 p.m. – 7:30 p.m.

Intermission

7:30 p.m. – 8:00 p.m.

SIAG/CST Business Meeting **complimentary beer and wine will be served**
516C

Tuesday, July 29

8:00 p.m. – 10:00 p.m.

PP1 Poster Session and Dessert Reception **held jointly with AN25 and GD25**
517B

Wednesday, July 30

7:30 a.m. – 5:00 p.m.

Registration
517 Foyer

8:00 a.m. – 10:00 a.m.

Concurrent Sessions

MT3 Stochastic Approximation and Learning
513C

MS30 Recent Advances in Mean Field Control and Mean Field Games - Part II of III
513D

MS31 Control, Stability and Applications Across Fields - Part III of III
513E

MS32 Learning and Computation for Mean Field Games and Control - Part III of III
513F

MS33 Port-Hamiltonian Systems Modeling and Control - Part II of III
514A

MS34 Estimation and Control of PDE systems - Part I of II
514B

MS35 New Advances in Optimal Control of Partial Differential Equations
514C

MS36 Emerging Techniques for Efficient and Secure Digital Control in Cyber-Physical Systems
515A

MS37 Tensor Computations in Control Systems - Part II of II
515B

CP6 Optimal Control
515C

9:30 a.m. – 4:30 p.m.

Exhibit Hall Open
517A

10:00 a.m. – 10:30 a.m.

Coffee Break
517A

10:30 a.m. – 10:40 a.m.

Closing Remarks
516C

Wednesday, July 30

Wednesday, July 30

10:40 a.m. – 11:25 a.m.

IP2 Controlability and Stabilization of the Beam Equation with Piezoelectric Actuators in Presence of Saturation and Hysteresis
Christophe Prieur, CNRS and Grenoble University, France
516C

11:30 a.m. – 12:15 p.m.

IP3 Deep Learning Meets System Theory: A Collaborative Frontier in Control Engineering and Data Science
Wei Kang, Naval Postgraduate School, U.S.
516C

12:15 p.m. – 1:45 p.m.

Lunch Break

1:45 p.m. – 2:45 p.m.

SIAM/CAIMS Annual Meetings (AN25): Past President's Address
Sven Leyffer, Argonne National Laboratory, U.S.
517D

2:45 p.m. – 3:00 p.m.

Intermission

3:00 p.m. – 3:45 p.m.

SIAM/CAIMS Annual Meetings (AN25): Jerald L. Ericksen Prize Lecture
Sergio Conti, Universität Bonn, Germany
517D

3:45 p.m. – 4:00 p.m.

Coffee Break
517A

4:00 p.m. – 6:00 p.m.

Concurrent Sessions

MS38 Recent Advances in Mean Field Control and Mean Field Games - Part III of III
513D

MS39 Recent Developments in Control and Optimization in Infinite Dimensional Systems- Part III of III
513E

MS40 Engineering Data Assimilation: Theory and Applications
513F

MS41 Port-Hamiltonian Systems Modeling and Control - Part III of III
514A

MS42 Estimation and Control of PDE systems - Part II of II
514B

MS43 Mathematical Perspectives on Control of Quantum Mechanical Systems - Part III of III
514C

MS44 Advances in Mathematical Methods for Control, Inverse Problems and Stabilization - Part III of III
515A

MS45 Stochastic Dynamical Systems: Optimal Control, Analysis, Algorithms, and Applications - Part II of II
515B

MS46 Advances in Geometric Estimation and Control: Averaging Techniques, Nonlinear Methods, and Applications
515C

CP7 Machine Learning
513C

6:00 p.m. – 6:15 p.m.

Intermission

6:15 p.m. – 7:15 p.m.

SIAM/CAIMS Annual Meetings (AN25): I. E. Block Community Lecture
Timothy A. Davis, Texas A&M University, U.S.
517D

7:15 p.m. – 8:15 p.m.

SIAM/CAIMS Annual Meetings (AN25): Community Reception
720/725

Abbreviation Key

CP = Contributed Presentation Session
IP = Invited Plenary Speaker
MS = Minisymposium
MT = Minitutorial
PP = Poster Session
SP = Special Lecture

Wednesday, July 30

7:30 a.m. – 5:00 p.m.

Registration
517BC Foyer

8:00 a.m. – 9:40 a.m.

Concurrent Sessions

CP1 Graph Algorithms and Applications
519ABCP2 Machine Learning and Data Intensive Algorithms
518C

9:30 a.m. – 4:30 p.m.

Exhibit Hall Open
517A

10:00 a.m. – 10:30 a.m.

Coffee Break
517A

10:30 a.m. – 11:15 a.m.

IP1 Finding Large Matchings in Dynamic Graphs via Extremal Graph Theory
Sepehr Assadi, University of Waterloo, Canada
519AB

11:30 a.m. – 12:15 p.m.

IP2 Title To Be Announced
Cynthia Phillips, Sandia National Laboratories, U.S.
519AB

12:15 p.m. – 1:45 p.m.

Lunch Break

1:45 p.m. – 2:45 p.m.

SIAM/CAIMS Annual Meetings (AN25)
SP6 Past President's Address: Solving Massive Combinatorial Optimization Problems
Sven Leyffer, Argonne National Laboratory, U.S.
517D

3:00 p.m. – 3:45 p.m.

SIAM/CAIMS Annual Meetings (AN25)
SP7 Jerald L. Ericksen Prize Lecture: Variational Analysis of a Data-Driven Formulation of the Theory of Elasticity
Sergio Conti, Universität Bonn, Germany
517D

3:45 p.m. – 4:00 p.m.

Coffee Break
517A

4:00 p.m. – 6:00 p.m.

MT1 Tutorial 2 – To Be Announced
519AB

Wednesday, July 30

6:15 p.m. – 7:15 p.m.

SIAM/CAIMS Annual Meetings (AN25)
I. E. Block Community Lecture
Timothy A. Davis, Texas A&M University, U.S.
517D

7:15 p.m. – 8:15 p.m.

SIAM/CAIMS Annual Meetings (AN25):
Community Reception
720/725

Thursday, July 31

7:30 a.m. – 4:30 p.m.

Registration
517BC Foyer

8:00 a.m. – 9:40 a.m.

Concurrent Sessions

CP3 Matrix Computations and Arithmetic
519ABCP4 Novel Combinatorial Applications
518C

9:30 a.m. – 4:30 p.m.

Exhibit Hall Open
517A

10:00 a.m. – 10:30 a.m.

Coffee Break
517A

10:30 a.m. – 11:15 a.m.

SP1 ACDA Early Career Prize Lecture
Alex Conway, Cornell University, U.S.
519AB

11:30 a.m. – 12:15 p.m.

JP1 Joint Plenary with AN25: Setting a Course for Post-Moore Software Performance
Charles Leiserson, Massachusetts Institute of Technology, U.S.
517D

12:15 p.m. – 1:45 p.m.

Lunch Break

1:45 p.m. – 2:30 p.m.

SIAM/CAIMS Annual Meetings (AN25)
SP9 CAIMS/SCMAI Research Prize Lecture: We are all Different: Modeling Key Individual Differences in Physiological Systems
Anita Layton, University of Waterloo, Canada
517C

Thursday, July 31

2:45 p.m. – 3:30 p.m.

SIAM/CAIMS Annual Meetings (AN25)
SP10 SIAM Industry Prize Lecture: Bringing Medicines to Patients with Mathematical Biology
Richard Allen, Pfizer Inc., U.S.
517D

3:30 p.m. – 4:00 p.m.

Coffee Break
517A

4:00 p.m. – 6:00 p.m.

MT2 Learning-Augmented Algorithms
519AB

6:15 p.m. – 6:45 p.m.

SIAG/ACDA Business Meeting
Complimentary beer and wine will be served
519AB

Friday, August 1

7:30 a.m. – 4:00 p.m.

Registration
517BC Foyer

8:00 a.m. – 9:40 a.m.

Concurrent Sessions

CP5 Algorithm Design and Analysis
519ABCP6 Parallel Algorithms
518C

10:00 a.m. – 10:30 a.m.

Coffee Break
517BC Foyer

10:30 a.m. – 11:15 a.m.

IP3 Adaptive Dynamic Bitvectors
Gonzalo Navarro, University of Chile, Chile
519AB

11:30 a.m. – 12:15 p.m.

IP4 Overcoming Parallelism Challenges in Data Analytics Using Sparse Linear Algebra
Giulia Guidi, Cornell University, U.S.
519AB

12:15 p.m. – 1:45 p.m.

Lunch Break

Friday, August 1

Friday, August 1

1:45 p.m. – 2:30 p.m.

SIAM/CAIMS Annual Meetings (AN25)

IP9 To Be Announced

Laura Schulz, Argonne National Laboratory, U.S.

517D

2:45 p.m. – 3:30 p.m.

SIAM/CAIMS Annual Meetings (AN25)

IP10 Integer Distances

David Eppstein, University of California, Irvine,
U.S.

517D

3:45 p.m. – 4:00 p.m.

Coffee Break

517BC Foyer

4:00 p.m. – 5:40 p.m.

Concurrent Sessions

CP7 Algorithmic Differentiation and Graph

Coloring

519AB

CP8 Graph Algorithms, Linear Algebra, Sorting

518C

Abbreviation Key

CP = Contributed Presentation Session

IP = Invited Plenary Speaker

MT = Minitutorial

SP= Special Lecture

Thank you to our Sponsors

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MATHÉMATIQUES

FIELDS

Pacific Institute *for the*
Mathematical Sciences

Google Research

Don't miss our Exhibitors in 517A!

Booth #2

American Institute of Mathematics

The American Institute of Mathematics is focused on advancing mathematical knowledge through collaboration, to broaden participation in the mathematical endeavor, to increase the awareness of the contributions of the mathematical sciences to society, and to preserve the history of mathematics through the acquisition of books and documents.

Booth #10

American Mathematical Society (AMS)

The AMS, founded in 1888 to further the interests of mathematical research and scholarship, serves the national and international community through its publications, meetings, advocacy and other programs, which promote mathematical research, its communication and uses, encourage and promote the transmission of mathematical understanding and skills, support mathematical education at all levels, advance the status of the profession of mathematics, encouraging and facilitating full participation of all individuals, foster an awareness and appreciation of mathematics and its connections to other disciplines and everyday life.

Booth #11

Association for Women in Mathematics (AWM)

The Association for Women in Mathematics (AWM) is a non-profit organization founded in 1971. Its mission is to create a community in which women and girls can thrive in their mathematical endeavors and to promote equitable opportunity and gender-inclusivity across the mathematical sciences.

Booth #3

De Gruyter Brill

Within STM, the Mathematics and Computer Science program reflects De Gruyter Brill's 330+ years of publishing expertise.

Balancing tradition and innovation, we advance through Open Access and Subscribe to Open. With top author ratings, our portfolio spans renowned titles to emerging fields. Looking ahead, we are confident that Mathematics and Computer Science is set for continued growth.

Booth #1

Deep Numerics

Deep Numerics, LLC is a company specializing in mathematical and geometric computing software. Its main product is Marble XD, a watertight, exact, unstructured 3D meshing software program. The company focuses on developing high performance algorithms addressing geometric and mathematical problems.

We specialize in 3D computational geometry software and tailored technical solutions for the geometric modeling and 3D printing industries.

Booth #7

SIAM Bookstore

Visit the SIAM book booth to browse our latest publications and take advantage of the special conference discount. Thinking of writing a book? Talk to Executive Editor Elizabeth Greenspan.

Booth #6

SIAM Membership

SIAM members should stop by the membership booth in the exhibit hall during open exhibit hours to claim a piece of free SIAM merch as a thank you for being a SIAM member. Come spin our wheel to see what free SIAM merchandise you will claim--a bucket hat, ball cap, pair of socks, t-shirt, hand sanitizer, lip balm, pen, notepad, or sticker!

Not a member? SIAM membership is included in all paid Annual Meeting attendees' registrations. You can claim your membership at the membership table and then spin the wheel for your free SIAM merchandise!

Attendees will also be able to find information about SIAM member benefits, SIAM activity groups, student chapters, upcoming conferences, and more...

(Merchandise available while supplies last.)

Booth #3

Springer Nature

Through our leading brands, trusted for more than 180 years, we provide technology-enabled products, platforms and services that help researchers to uncover new ideas and share their discoveries. We are proud to be part of progress and accelerate solutions to address the world's urgent challenges.

**exhibitor list is current as of June 26, 2025

Thank you to our Funding Agency



U.S. National Science Foundation

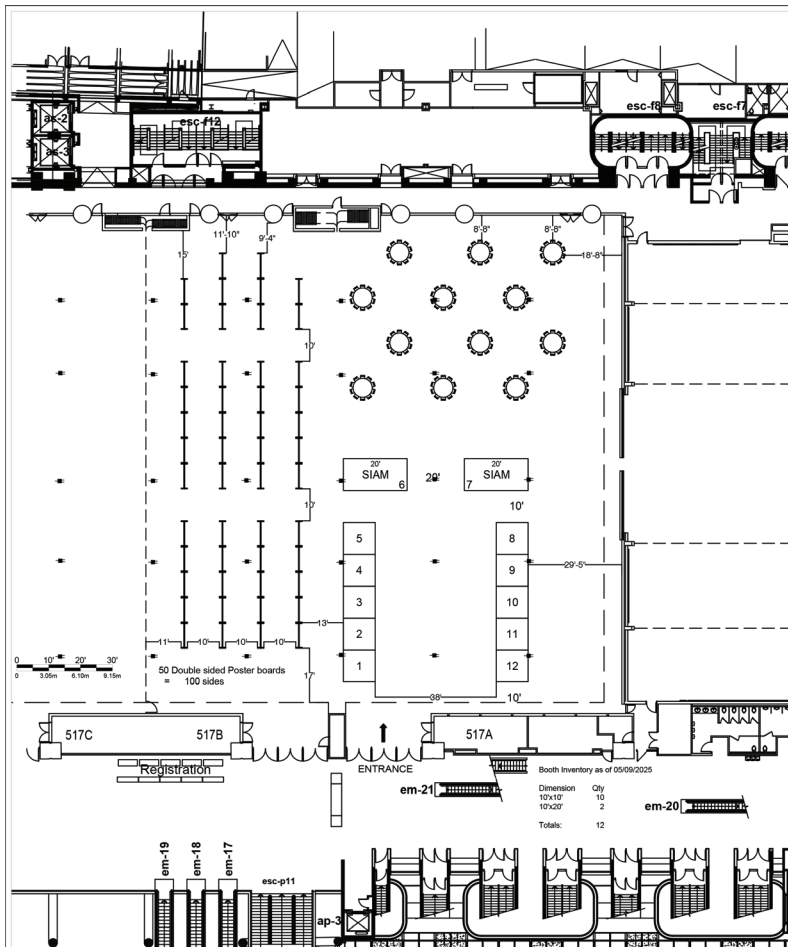
SIAM and the Organizing Committees wish to extend their thanks and appreciation to the U.S. National Science Foundation for its support of these conferences.

Montreal Convention Center

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