



Conference on Uncertainty Quantification

April 12–15, 2022 • Westin Peachtree Plaza, Atlanta, Georgia, U.S.

This conference is being held in hybrid format.

In-person events will take place at the Westin Peachtree Plaza in Atlanta, Georgia, U.S.

Online Program and Mobile App

Attendees are encouraged to visit

<https://www.siam.org/conferences/cm/program/program-and-abstracts/uq22-program-abstracts>
to view the Online Program Schedule and Mobile App details.

The Mobile App and Online Program Schedule contain the most up-to-date information.

A searchable abstract document is also posted.



3600 Market Street, 6th Floor

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Monday, April 11

Tuesday, April 12

Tuesday, April 12

5:00 p.m. - 8:00 p.m.

Badge Pick-Up and Information Desk
8th Floor Terrace

Tuesday, April 12

7:00 a.m. - 5:00 p.m.

Badge Pick-Up and Information Desk
8th Floor Terrace

8:00 a.m. - 9:00 a.m.

IP1 Opening Remarks and Presentation: Title To Be Determined
Youssef M. Marzouk, Massachusetts Institute of Technology, U.S.
Peachtree C&D - 8th Floor

9:00 a.m. - 9:30 a.m.

Coffee Break
Augusta ABCD - 7th Floor



9:30 a.m. - 11:30 a.m.

Concurrent Sessions

MS1 Uncertainty Quantification and Parameter Estimation in Climate Models - Part I of II
Peachtree C&D - 8th Floor

MS2 Recent Advances in Machine Learning and Data-Driven Methods for Physical Sciences and Engineering - Part I of III
Augusta E - 7th Floor

MS3 Scalable Uncertainty Quantification for Forward and Inverse Problems - Part I of II
Augusta F - 7th Floor

MS4 Nonlinear Model Reduction Methods for Random or Parametric Time Dependent Problems - Part I of III
Augusta G - 7th Floor

MS5 Multilevel and Multifidelity Monte Carlo - Part I of II
Augusta H - 7th Floor

MS6 Optimal Transport in Uncertainty Quantification and Learning - Part I of II
Chastain D - 6th Floor

MS7 Operator Learning in PDEs, Inverse Problems, and UQ - Part I of II
Chastain E - 6th Floor

MS8 Robust and Efficient Probabilistic Deep Learning for Scientific data and Beyond - Part I of III
Chastain F - 6th Floor

MS9 Uncertainty Quantification (UQ) in Energy Systems
Chastain G - 6th Floor

MS10 Metamodel-Based Approaches for Robust (Stochastic) Inversion and Optimization - Part I of III
Chastain H - 6th Floor

MS11 Bayesian Calibration and Machine Learning Methods for Uncertainty Quantification - Part I of II
Chastain I - 6th Floor

MS12 Recent Advances in Optimal Experimental Design - Part I of III
Chastain J - 6th Floor

MS13 Theory and Simulation of Failure Probabilities and Rare Events - Part I of III
Peachtree I - 8th Floor

MS14 Uncertainty Quantification for Data-Intensive Inverse Problems and Machine Learning - Part I of III
Peachtree 2 - 8th Floor

CP1 UQ in Probability and Stochastic Processes
Peachtree A - 8th Floor

CP2 UQ in Inverse Problems and Parameter Estimation - Part I
Peachtree B - 8th Floor

11:30 a.m. - 1:00 p.m.

Lunch Break
Attendees on their own

1:00 p.m. - 1:45 p.m.

IP2 Machine Learning in Data Assimilation and Inverse Problems
Rebecca Willett, University of Chicago, U.S.
Peachtree C&D - 8th Floor

1:45 p.m. - 2:00 p.m.

Intermission

2:00 p.m. - 4:00 p.m.

Concurrent Sessions

MS15 Uncertainty Quantification and Propagation in Climate Models - Part I of II
Peachtree C&D - 8th Floor

MS16 Physics-based Models, Machine Learning and Uncertainty Quantification - Part I of II
Augusta E - 7th Floor

MS17 Uncertainty Quantification for Data-Intensive Inverse Problems and Machine Learning - Part II of III
Augusta F - 7th Floor

MS18 Quantification of Uncertainties in Computational Fluid Dynamics - Part I of III
Augusta G - 7th Floor

MS19 Recent Advances in Markov Chain Monte Carlo
Augusta H - 7th Floor

MS20 High-Dimensional Approximation and Integration using QMC and Kernel Methods - Part I of III
Chastain D - 6th Floor

MS21 Shape Uncertainty Quantification Meets Shape Statistics - Part I of II
Chastain E - 6th Floor

MS22 Surrogate Modeling for Forward and Inverse Problems in Uncertainty Quantification - Part I of III
Chastain F - 6th Floor

MS23 Uncertainty Quantification for High-Dimensional Inverse Problems - Part I of III
Chastain G - 6th Floor

MS24 PDE-Constrained Optimization Under Uncertainty - Part I of III
Chastain H - 6th Floor

MS25 Emulation for Coupled Multiphysics Systems
Chastain I - 6th Floor

MS26 Model-Based Optimal Experimental Design - Part I of III
Chastain J - 6th Floor

MS27 Learning Dynamics and the Dynamics of Learning - Part I of II
Peachtree 1 - 8th Floor

MS28 Machine Learning Techniques for Quantifying Rare Events - Part I of II
Peachtree 2 - 8th Floor

CP3 UQ in Inverse Problems and Parameter Estimation - Part II
Peachtree A - 8th Floor

CP4 UQ in Life Science Applications
Peachtree B - 8th Floor

4:00 p.m. - 4:30 p.m.

Coffee Break
Augusta ABCD - 7th Floor



4:30 p.m. - 6:30 p.m.

Concurrent Sessions

MS29 Remote Sensing Inverse Problems for Understanding Atmospheric Greenhouse Gases - Part I of II
Peachtree C&D - 8th Floor

MS30 Verification Techniques in Computational Physics and Applied Mathematics - Part I of III
Augusta E - 7th Floor

MS31 Quantifying Predictive Uncertainty with Physics-Informed Machine Learning - Part I of III
Augusta F - 7th Floor

MS32 Nonlinear Model Reduction Methods for Random or Parametric Time Dependent Problems - Part II of III
Augusta G - 7th Floor

MS33 Advanced Multilevel and Multifidelity UQ Strategies: Applications, Generalized Model Hierarchies, and Data-Driven Approaches - Part I of III
Augusta H - 7th Floor

MS34 Methods for Hierarchical Bayesian Inverse Problems - Part I of III
Chastain D - 6th Floor

MS35 Shape Uncertainty Quantification Meets Shape Statistics - Part II of II
Chastain E - 6th Floor

MS36 Surrogate Modeling for Forward and Inverse Problems in Uncertainty Quantification - Part II of III
Chastain F - 6th Floor

Tuesday, April 12

Wednesday, April 13

Wednesday, April 13

MS37 Uncertainty Quantification for Large-Scale Scientific Data Analytics - Part I of III
Chastain G - 6th Floor

MS38 Information Theory, Data Assimilation and Stochastic Models for Multiscale Systems - Part I of III
Chastain H - 6th Floor

MS39 Statistical Surrogate Modeling and Optimization for Stochastic Simulation - Part I of III
Chastain I - 6th Floor

MS40 Sample-Efficient Sequential Decision Making Under Uncertainty - Part I of II
Chastain J - 6th Floor

MS41 Advanced Methods for High Dimensional Bayesian Inference and Nonlinear Filtering - Part I of II
Peachtree 1 - 8th Floor

MS42 Data-Centric Machine Learning for Uncertainty Quantification in Complex Systems - Part I of III
Peachtree 2 - 8th Floor

MS43 Operator Learning for Uncertainty Quantification - Part I of III
Peachtree A - 8th Floor

CP5 Data Sciences and Machine Learning - Part I
Peachtree B - 8th Floor

6:30 p.m. - 8:00 p.m.

Dinner Break
Attendees on their own

8:00 p.m. - 10:00 p.m.

PP1 Welcome Reception and Poster Session
Augusta ABCD - 7th Floor



Wednesday, April 13

7:30 a.m. - 5:00 p.m.

Badge Pick-Up and Information Desk
8th Floor Terrace

8:10 a.m. - 10:10 a.m.

Concurrent Sessions

MS44 Uncertainty Quantification and Parameter Estimation in Climate Models - Part II of II
Peachtree C&D - 8th Floor

MS45 Recent Advances in Machine Learning and Data-Driven Methods for Physical Sciences and Engineering - Part II of III
Augusta E - 7th Floor

MS46 Scalable Uncertainty Quantification for Forward and Inverse Problems - Part II of II
Augusta F - 7th Floor

MS47 Software for Uncertainty Quantification - Part I of II
Augusta G - 7th Floor

MS48 Multilevel and Multifidelity Monte Carlo - Part II of II
Augusta H - 7th Floor

MS49 Optimal Transport in Uncertainty Quantification and Learning - Part II of II
Chastain D - 6th Floor

MS50 IGA and Other Spline-Based Methods in UQ - Part I of III
Chastain E - 6th Floor

MS51 Variational Inference Bridging Application and Theory - Part I of III
Chastain F - 6th Floor

MS52 Uncertainty Quantification for High-Dimensional Inverse Problems - Part II of III
Chastain G - 6th Floor

MS53 PDE-Constrained Optimization Under Uncertainty - Part II of III
Chastain H - 6th Floor

MS54 Bayesian Calibration and Machine Learning Methods for Uncertainty Quantification - Part II of II
Chastain I - 6th Floor

MS55 Recent Advances in Optimal Experimental Design - Part II of III
Chastain J - 6th Floor

MS56 Theory and Simulation of Failure Probabilities and Rare Events - Part II of III
Peachtree 1 - 8th Floor

MS57 Machine Learning Techniques for Quantifying Rare Events - Part II of II
Peachtree 2 - 8th Floor

CP6 Data Sciences and Machine Learning - Part II
Peachtree A - 8th Floor

CP7 Dynamical Systems and PDEs - Part I
Peachtree B - 8th Floor

10:10 a.m. - 10:40 a.m.

Coffee Break
Augusta ABCD - 7th Floor



10:40 a.m. - 11:15 a.m.

SP1 Remarks and Presentation: SIAG/Uncertainty Quantification Early Career Prize Lecture - Scalable Gaussian Process for Computer Model Emulation and Uncertainty Quantification
Mengyang Gu, University of California, Santa Barbara, U.S.
Peachtree C&D - 8th Floor

11:15 a.m. - 12:45 p.m.

Lunch Break
Attendees on their own

12:45 p.m. - 1:30 p.m.

IP3 Learning Physics-based Models from Data: Perspectives from Model Reduction
Karen E. Willcox, University of Texas at Austin, U.S.
Peachtree C&D - 8th Floor

1:30 p.m. - 1:45 p.m.

Intermission

1:45 p.m. - 3:45 p.m.

Concurrent Sessions

MS58 Uncertainty Quantification and Propagation in Climate Models - Part II of II
Peachtree C&D - 8th Floor

MS59 Physics-Based Models, Machine Learning and Uncertainty Quantification - Part II of II
Augusta E - 7th Floor

MS60 Physics-Informed and Data-Driven Predictive Models with Quantified Uncertainty - Part I of III
Augusta F - 7th Floor

MS61 Sampling via Variational Methods - Part I of II
Augusta G - 7th Floor

MS62 Advanced Multilevel and Multifidelity UQ Strategies: Surrogates, Forward Propagation, Inverse Problems and Optimization - Part I of III
Augusta H - 7th Floor

MS63 High-Dimensional Approximation and Integration using QMC and Kernel Methods - Part II of III
Chastain D - 6th Floor

MS64 Operator Learning in PDEs, Inverse Problems, and UQ - Part II of II
Chastain E - 6th Floor

MS65 Robust and Efficient Probabilistic Deep Learning for Scientific data and Beyond - Part II of III
Chastain F - 6th Floor

MS66 New Developments in Gaussian Processes
Chastain G - 6th Floor

MS67 Metamodel-Based Approaches for Robust (Stochastic) Inversion and Optimization - Part II of III
Chastain H - 6th Floor

MS68 Statistical Surrogate Modeling and Optimization for Stochastic Simulation - Part II of III
Chastain I - 6th Floor

MS69 Model-Based Optimal Experimental Design - Part II of III
Chastain J - 6th Floor

MS70 Learning Dynamics and the Dynamics of Learning - Part II of II
Peachtree 1 - 8th Floor

MS71 Data-Centric Machine Learning for Uncertainty Quantification in Complex Systems - Part II of III
Peachtree 2 - 8th Floor

MS72 Operator Learning for Uncertainty Quantification - Part II of III
Peachtree A - 8th Floor

CP8 Dynamical Systems and PDEs - Part II
Peachtree B - 8th Floor

3:45 p.m. - 4:15 p.m.

Coffee Break
Augusta ABCD - 7th Floor



Wednesday, April 13

Wednesday, April 13

Thursday, April 14

4:15 p.m. - 6:15 p.m.

Concurrent Sessions

MS73 Remote Sensing Inverse Problems for Understanding Atmospheric Greenhouse Gases - Part II of II

Peachtree C&D - 8th Floor

MS74 Verification Techniques in Computational Physics and Applied Mathematics - Part II of III

Augusta E - 7th Floor

MS75 Efficient Uncertainty Quantification with Physics-Informed and Data-Driven Models - Part I of III

Augusta F - 7th Floor

MS76 Nonlinear Model Reduction Methods for Random or Parametric Time Dependent Problems - Part III of III

Augusta G - 7th Floor

MS77 Advanced Multilevel and Multifidelity UQ Strategies: Applications, Generalized Model Hierarchies, and Data-Driven Approaches -- Part II of III

Augusta H - 7th Floor

MS78 Methods for Hierarchical Bayesian Inverse Problems - Part II of III

Chastain D - 6th Floor

MS79 Uncertainty, Robustness and Safety in Deep Learning Part I of III

Chastain E - 6th Floor

MS80 Surrogate Modeling for Forward and Inverse Problems in Uncertainty Quantification - Part III of III

Chastain F - 6th Floor

MS81 Advances in Measure Transport for Representing and Comparing Distributions - Part I of II

Chastain G - 6th Floor

MS82 PDE-Constrained Optimization Under Uncertainty - Part III of III

Chastain H - 6th Floor

MS83 Surrogate-Based Adaptive Design of Computer Experiments

Chastain I - 6th Floor

MS84 Sample-Efficient Sequential Decision Making Under Uncertainty - Part II of II

Chastain J - 6th Floor

MS85 Theory and Simulation of Failure Probabilities and Rare Events - Part III of III

Peachtree 1 - 8th Floor

MS86 Machine Learning and Stochastic Modelling for Dynamical Systems - Part I of II

Peachtree 2 - 8th Floor

MS87 Incorporating Structural Information in Kernel Methods - Part I of II

Peachtree A - 8th Floor

CP9 UQ in Models and Simulations - Part I

Peachtree B - 8th Floor

6:15 p.m. - 6:30 p.m.

Intermission

6:30 p.m. - 7:30 p.m.

SIAG/UQ Business Meeting

Complimentary beer and wine will be served.

Peachtree C&D - 8th Floor



Thursday, April 14

7:30 a.m. - 5:00 p.m.

Badge Pick-Up and Information Desk
8th Floor Terrace

8:10 a.m. - 10:10 a.m.

Concurrent Sessions

MS88 Uncertainty Quantification for Earth Remote Sensing - Part I of II

Peachtree C&D - 8th Floor

MS89 Recent Advances in Machine Learning and Data-Driven Methods for Physical Sciences and Engineering - Part III of III

Augusta E - 7th Floor

MS90 Quantifying Predictive Uncertainty with Physics-Informed Machine Learning - Part II of III

Augusta F - 7th Floor

MS91 The Science of Hazards - Part I of II

Augusta G - 7th Floor

MS92 Robustness Analysis of Uncertainty Quantification to Distribution Uncertainty

Augusta H - 7th Floor

MS93 Advances at the Interface of Uncertainty Quantification and Machine Learning - Part I of III

Chastain D - 6th Floor

MS94 Uncertainty and Reliability of Machine Learning Methods - Part I of II

Chastain E - 6th Floor

MS95 Variational Inference Bridging Application and Theory - Part II of III

Chastain F - 6th Floor

MS96 Uncertainty Quantification for High-Dimensional Inverse Problems - Part III of III

Chastain G - 6th Floor

MS97 Information Theory, Data Assimilation and Stochastic Models for Multiscale Systems - Part II of III

Chastain H - 6th Floor

MS98 Statistical Surrogate Modeling and Optimization for Stochastic Simulation - Part III of III

Chastain I - 6th Floor

MS99 Recent Advances in Optimal Experimental Design - Part III of III

Chastain J - 6th Floor

MS100 Advanced Methods for High Dimensional Bayesian Inference and Nonlinear Filtering - Part II of II

Peachtree 1 - 8th Floor

MS101 Novel Approaches in Variational Particle Filtering

Peachtree 2 - 8th Floor

CP10 UQ in Models and Simulations - Part II

Peachtree A - 8th Floor

CP11 UQ in Optimization and Control

Peachtree B - 8th Floor

10:10 a.m. - 10:40 a.m.

Coffee Break

Augusta ABCD - 7th Floor



10:40 a.m. - 11:30 a.m.

IP4 Remarks and Presentation: A New Age of Climate Modeling: Evolving Risk Assessment in the Post-Paris World

Benjamin Sanderson, Centre for International Climate and Environmental Research, Norway

Peachtree C&D - 8th Floor

11:30 a.m. - 1:00 p.m.

Lunch Break

Attendees on their own

1:00 p.m. - 1:45 p.m.

IP5 Uncertainty Quantification for Remote Sensing Data

Amy Braverman, NASA, Jet Propulsion Laboratory, U.S.

Peachtree C&D - 8th Floor

1:45 p.m. - 2:00 p.m.

Intermission

2:00 p.m. - 4:00 p.m.

Concurrent Sessions

MS102 Uncertainty Quantification and Data Assimilation for Space Weather Applications - Part I of II

Peachtree C&D - 8th Floor

MS103 History Matching and Uncertainty Quantification - Part I of II

Augusta E - 7th Floor

MS104 Physics-Informed and Data-Driven Predictive Models with Quantified Uncertainty - Part II of III

Augusta F - 7th Floor

MS105 Sampling via Variational Methods - Part II of II

Augusta G - 7th Floor

MS106 Advanced Multilevel and Multifidelity UQ Strategies: Surrogates, Forward Propagation, Inverse Problems and Optimization - Part II of III

Augusta H - 7th Floor

MS107 High-Dimensional Approximation and Integration using QMC and Kernel Methods - Part III of III

Chastain D - 6th Floor

MS108 IGA and Other Spline-Based Methods in UQ - Part II of III

Chastain E - 6th Floor

Thursday, April 14

Thursday, April 14

Friday, April 15

MS109 Uncertainty Quantification for Large-Scale Scientific Data Analytics - Part II of III

Chastain F - 6th Floor

MS110 Statistical and Computational Guarantees for Bayesian Inverse Problems

Chastain G - 6th Floor

MS111 Metamodel-Based Approaches for Robust (Stochastic) Inversion and Optimization - Part III of III

Chastain H - 6th Floor

MS112 Deep Learning for Optimization - Part I of II

Chastain I - 6th Floor

MS113 New Trend in Sensitivity Analysis - Part II of II

Chastain J - 6th Floor

MS114 Characterization and Prediction of Rare and Extreme Events in Complex Systems - Part I of II

Peachtree 1 - 8th Floor

MS115 Machine Learning and Stochastic Modelling for Dynamical Systems - Part II of II

Peachtree 2 - 8th Floor

MS116 Operator Learning for Uncertainty Quantification - Part III of III

Peachtree A - 8th Floor

CP12 UQ in Imaging and Visualization

Peachtree B - 8th Floor

4:00 p.m. - 4:30 p.m.

Coffee Break

Augusta ABCD - 7th Floor



4:30 p.m. - 6:30 p.m.

Concurrent Sessions

MS117 Quantification of Uncertainties in Computational Fluid Dynamics - Part II of III

Peachtree C&D - 8th Floor

MS118 Data-Driven Approaches to Rare and Extreme Events - Part I of II

Augusta E - 7th Floor

MS119 Efficient Uncertainty Quantification with Physics-Informed and Data-Driven Models - Part II of III

Augusta F - 7th Floor

MS120 Random PDEs with Lévy Fields

Augusta G - 7th Floor

MS121 Advanced Multilevel and Multifidelity UQ Strategies: Applications, Generalized Model Hierarchies, and Data-Driven Approaches - Part III of III

Augusta H - 7th Floor

MS122 Methods for Hierarchical Bayesian Inverse Problems - Part III of III

Chastain D - 6th Floor

MS123 Uncertainty, Robustness and Safety in Deep Learning Part II of III

Chastain E - 6th Floor

MS124 Robust and Efficient Probabilistic Deep Learning for Scientific Data and Beyond - Part III of III

Chastain F - 6th Floor

MS125 Multilevel Data Assimilation

Chastain G - 6th Floor

***MS126** Information Theory, Data Assimilation and Stochastic Models for Multiscale Systems - Part III of III

Chastain H - 6th Floor

MS127 Deep Learning for High-Dimensional Parametric PDEs - Part I of II

Chastain I - 6th Floor

MS128 Decision Making Under Uncertainty: Supporting Technologies and Applications - Part I of II

Chastain J - 6th Floor

MS129 Emulation and Uncertainty Quantification Under Constraints - Part I of II

Peachtree 1 - 8th Floor

MS130 Recent Trends in Global Sensitivity Analysis in Complex Settings - Part I of II

Peachtree 2 - 8th Floor

MS131 Kernel Methods for Numerical Integration

Peachtree A - 8th Floor

CP13 UQ in Scientific and Statistical Computing - Part I

Peachtree B - 8th Floor

MS139 Variational Inference Bridging Application and Theory - Part III of III

Chastain F - 6th Floor

MS140 Advances in Measure Transport for Representing and Comparing Distributions - Part II of II

Chastain G - 6th Floor

MS141 Uncertainty Quantification in Molecular Modeling - Part I of III

Chastain H - 6th Floor

MS142 Challenges in Data-Driven Predictions for Safety-Critical Systems

Chastain I - 6th Floor

MS143 Machine Learning for Design under Uncertainty - Part I of II

Chastain J - 6th Floor

MS144 New Trend in Sensitivity Analysis - Part I of II

Peachtree 1 - 8th Floor

MS145 Sensitivity Analysis of Quantitative Systems Pharmacology Models

Peachtree 2 - 8th Floor

CP14 UQ in Scientific and Statistical Computing - Part II

Peachtree A - 8th Floor

CP15 Applications of UQ - Part I

Peachtree B - 8th Floor

10:10 a.m. - 10:40 a.m.

Coffee Break

Augusta ABCD - 7th Floor



Friday, April 15

7:30 a.m. - 5:00 p.m.

Badge Pick-Up and Information Desk
8th Floor Terrace

8:10 a.m. - 10:10 a.m.

Concurrent Sessions

MS132 Uncertainty Quantification for Earth Remote Sensing - Part II of II

Peachtree C&D - 8th Floor

MS133 Data-Driven Approaches to Rare and Extreme Events - Part II of II

Augusta E - 7th Floor

MS134 Quantifying Predictive Uncertainty with Physics-Informed Machine Learning - Part III of III

Augusta F - 7th Floor

MS135 The Science of Hazards - Part II of II

Augusta G - 7th Floor

MS136 Advanced Multilevel and Multifidelity UQ Strategies: Surrogates, Forward Propagation, Inverse Problems and Optimization - Part III of III

Augusta H - 7th Floor

MS137 Advances at the Interface of Uncertainty Quantification and Machine Learning - Part II of III

Chastain D - 6th Floor

MS138 Uncertainty and Reliability of Machine Learning Methods - Part II of II

Chastain E - 6th Floor

10:40 a.m. - 11:30 a.m.

IP6 Closing Remarks and Presentation: Structural Uncertainty Matters: How Strong Modelling Assumptions Misled on the Role of Lockdowns in the UK Covid-19 Epidemic

Simon Wood, University of Edinburgh, United Kingdom

Peachtree C&D - 8th Floor

11:30 a.m. - 1:00 p.m.

Lunch Break

Attendees on their own

1:00 p.m. - 1:45 p.m.

IP7 Title To Be Determined

Balaji Lakshminarayanan, Google Brain, U.S.
Peachtree C&D - 8th Floor

1:45 p.m. - 2:00 p.m.

Intermission

2:00 p.m. - 4:00 p.m.

Concurrent Sessions

MS146 Uncertainty Quantification and Data Assimilation for Space Weather Applications - Part II of II

Peachtree C&D - 8th Floor

Friday, April 15

Friday, April 15

MS147 Verification Techniques in Computational Physics and Applied Mathematics - Part III of III
Augusta E - 7th Floor

MS148 Physics-Informed and Data-Driven Predictive Models with Quantified Uncertainty - Part III of III
Augusta F - 7th Floor

MS149 Software for Uncertainty Quantification - Part II of II
Augusta G - 7th Floor

MS150 Uncertainty in Material Modeling and Design - Part I of II
Augusta H - 7th Floor

MS151 Uncertainty Quantification for Data-Intensive Inverse Problems and Machine Learning - Part III of III
Chastain D - 6th Floor

MS152 IGA and Other Spline-Based Methods in UQ - Part III of III
Chastain E - 6th Floor

MS153 Uncertainty Quantification for Large-Scale Scientific Data Analytics - Part III of III
Chastain F - 6th Floor

MS154 Reduced Order Modelling for Forward and Inverse UQ - Part I of II
Chastain G - 6th Floor

MS155 Uncertainty Quantification in Molecular Modeling - Part II of III
Chastain H - 6th Floor

MS156 Deep Learning for Optimization - Part II of II
Chastain I - 6th Floor

MS157 Decision Making Under Uncertainty: Supporting Technologies and Applications - Part II of II
Chastain J - 6th Floor

MS158 Characterization and Prediction of Rare and Extreme Events in Complex Systems - Part II of II
Peachtree 1 - 8th Floor

MS159 Recent Trends in Global Sensitivity Analysis in Complex Settings - Part II of II
Peachtree 2 - 8th Floor

CP16 UQ in Scientific and Statistical Computing - Part III
Peachtree A - 8th Floor

CP17 Applications of UQ - Part II
Peachtree B - 8th Floor

4:00 p.m. - 4:30 p.m.

Coffee Break
Augusta ABCD - 7th Floor



4:30 p.m. - 6:30 p.m.

Concurrent Sessions

MS160 Quantification of Uncertainties in Computational Fluid Dynamics - Part III of III
Peachtree C&D - 8th Floor

MS161 History Matching and Uncertainty Quantification - Part II of II
Augusta E - 7th Floor

MS162 Efficient Uncertainty Quantification with Physics-Informed and Data-Driven Models - Part III of III
Augusta F - 7th Floor

MS163 Incorporating Structural Information in Kernel Methods - Part II of II
Peachtree A - 8th Floor

MS164 Uncertainty in Material Modeling and Design - Part II of II
Augusta H - 7th Floor

MS165 Advances at the Interface of Uncertainty Quantification and Machine Learning - Part III of III
Chastain D - 6th Floor

MS166 Uncertainty, Robustness and Safety in Deep Learning Part III of III
Chastain E - 6th Floor

MS167 Model-Based Optimal Experimental Design - Part III of III
Chastain F - 6th Floor

MS168 Reduced Order Modelling for Forward and Inverse UQ - Part II of II
Chastain G - 6th Floor

MS169 Uncertainty Quantification in Molecular Modeling - Part III of III
Chastain H - 6th Floor

MS170 Deep Learning for High-Dimensional Parametric PDEs - Part II of II
Chastain I - 6th Floor

MS171 Machine Learning for Design under Uncertainty - Part II of II
Chastain J - 6th Floor

MS172 Emulation and Uncertainty Quantification Under Constraints - Part II of II
Peachtree 1 - 8th Floor

MS173 Data-Centric Machine Learning for Uncertainty Quantification in Complex Systems - Part III of III
Peachtree 2 - 8th Floor

CP18 Applications of UQ - Part III
Peachtree B - 8th Floor

This conference is in hybrid format

All technical sessions and the Business Meeting will be accessible to both In-Person and Virtual registrants. Other events are for In-Person registrants.

MS presentations are 25 minutes plus an additional 5 minutes for discussion.

CP presentations are 15 minutes plus an additional 5 minutes for discussion.

Key to abbreviations and symbols



= Business Meeting



= Coffee Break



= Refreshments Served

*

= Extended Session

CP = Contributed Presentation Session

IP = Invited Plenary Speaker

MS = Minisymposium

PP = Poster Session

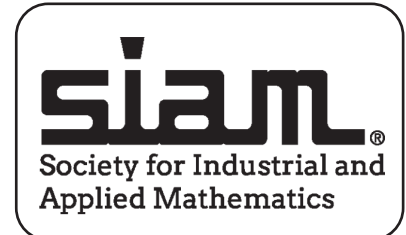
SP = Special Lecture

SIAM Activity Group on Uncertainty Quantification (SIAG/UQ)

www.siam.org/activity/uq

A great way to get involved!

Collaborate and interact with mathematicians and applied scientists whose work involves uncertainty and error on mathematical descriptions of real phenomena.



ACTIVITIES INCLUDE

- Special sessions at SIAM Meetings
- Biennial conference

BENEFITS OF SIAG/UQ MEMBERSHIP

- Listing in the SIAG's online membership directory
- Additional \$15 discount on registration at the SIAM Conference on Uncertainty Quantification
- Membership in the SIAG/UQ Community on the SIAM Engage platform
- Eligibility for candidacy for SIAG/UQ office
- Participation in the selection of SIAG/UQ officers

ELIGIBILITY

- Be a current SIAM member

COST

- \$15 per year
- Student members can join two activity groups for free!

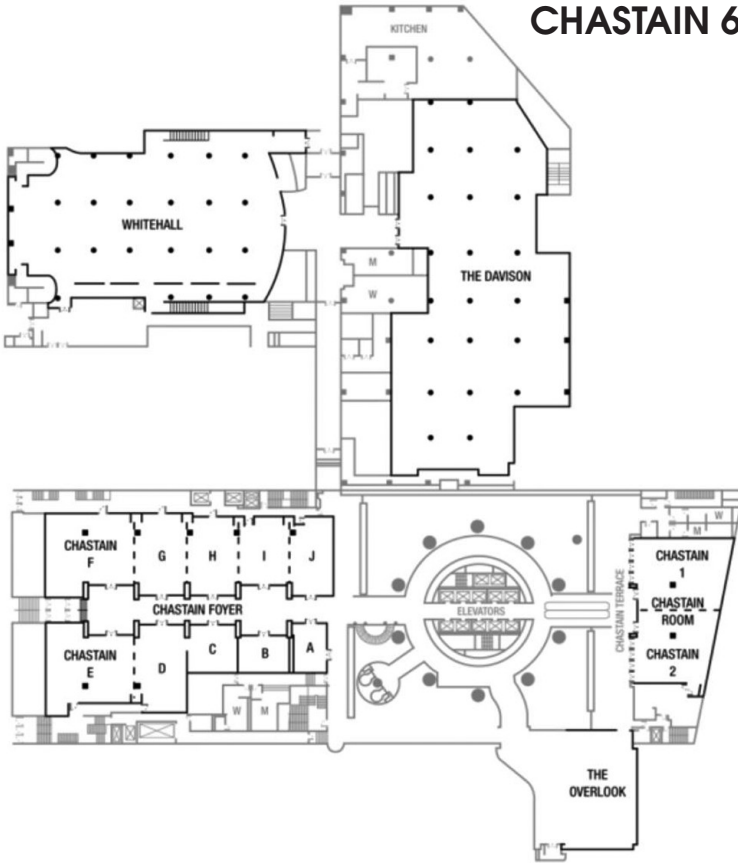
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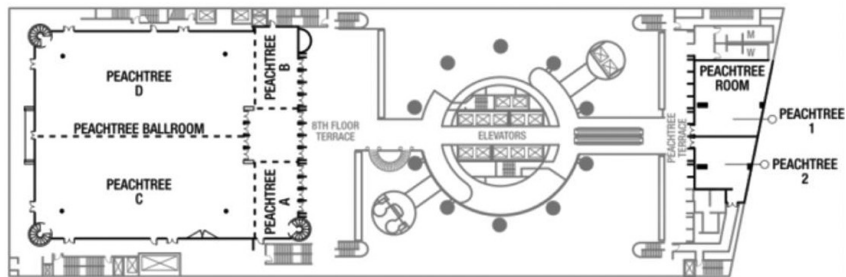
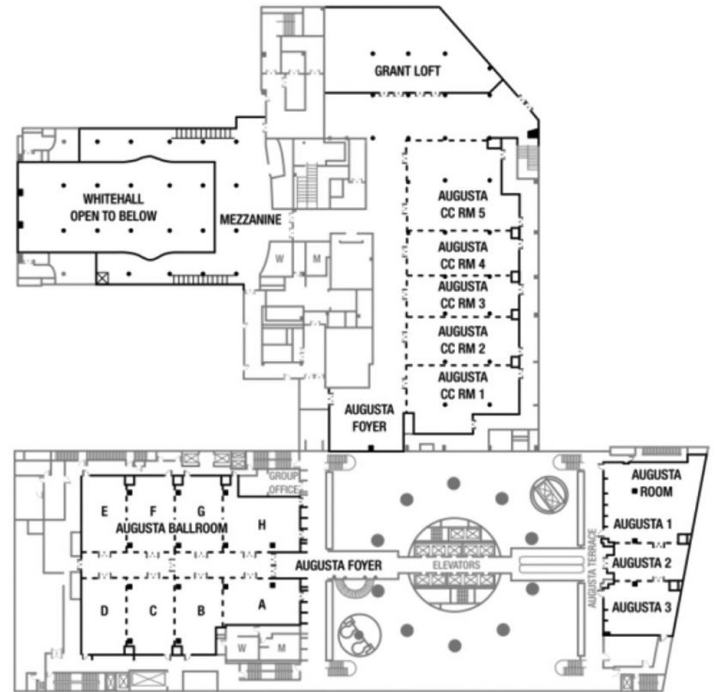
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