



Conference on Control and Its Applications

July 24–26, 2023

Sonesta Philadelphia Rittenhouse Square Hotel
Philadelphia, Pennsylvania, U.S.

Online Program and Mobile App

Attendees are encouraged to visit

<https://www.siam.org/conferences/cm/program/program-and-abstracts/ct23-program-abstracts>
to view the Online Program Schedule.

The Mobile App and Online Program Schedule contain the most up-to-date information.
A searchable abstract document is also posted.

SIAM Events Mobile App



<https://www.tripbuildermedia.com/apps/siam>

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Sunday, July 23**5:00 p.m. – 8:00 p.m.**Registration
*Wyeth Foyer - 2nd Floor***6:00 p.m. – 8:00 p.m.**Welcome Reception
*Wyeth Foyer - 2nd Floor***Monday, July 24****8:00 a.m. – 5:30 p.m.**Registration
*Wyeth Foyer - 2nd Floor***9:00 a.m. – 9:15 a.m.**Welcome Remarks
*Wyeth Gallery C - 2nd Floor***9:15 a.m. – 10:00 a.m.****IP1** Control Problems for Multiagent Systems and the Smoothing Traffic via Autonomous Vehicles
Benedetto Piccoli, Rutgers University, U.S.
*Wyeth Gallery C - 2nd Floor***9:30 a.m. – 4:30 p.m.**Exhibitor Hours
*Wyeth Foyer - 2nd Floor***10:00 a.m. – 10:30 a.m.**Coffee Break
*Wyeth Foyer - 2nd Floor***10:30 a.m. – 12:30 p.m.****Concurrent Sessions****MS1** Recent Developments in Control of Fluid Flows - Part I of III
*Wyeth Gallery C - 2nd Floor***MS2** Nonlinear Model Order Reduction for Control Applications - Part I of II
*Wyeth Gallery A - 2nd Floor***MS3** Applications of Control in Biological Systems- Part I of II
*Wyeth Gallery B - 2nd Floor***MS4** Control, Stability and Their Applications- Part I of III
*Whistler A - 2nd Floor***MS5** Optimality and Robustness in Path-Planning and Routing- Part I of III
*Whistler B - 2nd Floor***MS6** PDE Constrained Optimization: Theory, Numerics and Applications - Part I of II
*Homer- 2nd Floor***MS7** Dynamics and Control of Sweeping Processes- Part I of III
*Hopper - 2nd Floor***Monday, July 24****MS8** Diagnostic and Control Systems for Nuclear Fusion Reactors - Part I of II
*Benton - 8th Floor***MS9** Estimation and Control of PDE Systems- Part I of III
*Warhol - 8th Floor***12:30 p.m. – 2:00 p.m.**Lunch Break
*Attendees on their own***2:00 p.m. – 4:00 p.m.****Concurrent Sessions****MS10** Recent Developments in Control of Fluid Flows - Part II of III
*Wyeth Gallery C - 2nd Floor***MS11** Nonlinear Model Order Reduction for Control Applications - Part II of II
*Wyeth Gallery A - 2nd Floor***MS12** Applications of Control in Biological Systems- Part II of II
*Wyeth Gallery B - 2nd Floor***MS13** Control, Stability and Their Applications- Part II of III
*Whistler A - 2nd Floor***MS14** Optimality and Robustness in Path-Planning and Routing- Part II of III
*Whistler B - 2nd Floor***MS15** PDE Constrained Optimization: Theory, Numerics and Applications - Part II of II
*Homer- 2nd Floor***MS16** Dynamics and Control of Sweeping Processes- Part II of III
*Hopper - 2nd Floor***MS17** Diagnostic and Control Systems for Nuclear Fusion Reactors - Part II of II
*Benton - 8th Floor***MS18** Estimation and Control of PDE Systems- Part II of III
*Warhol - 8th Floor***4:00 p.m. – 4:30 p.m.**Coffee Break
*Wyeth Foyer - 2nd Floor***4:30 p.m. – 5:15 p.m.****PD1** Mathematics Research and Funding Opportunities
*Wyeth Gallery C - 2nd Floor***5:15 p.m. – 5:35 p.m.****SP1** Best Sicon Paper Prize Lecture #1: An Introduction to Graph-Structured Optimal Transport for Estimation and Control
Isabel Haasler, École Polytechnique Fédérale de Lausanne, Switzerland
*Wyeth Gallery C - 2nd Floor***Monday, July 24****5:40 p.m. – 6:00 p.m.****SP2** Best SICON Paper Prize Lecture #2: Two-Person Zero-Sum Stochastic Linear-Quadratic Differential Games
Jingrui Sun, Southern University of Sciences and Technology, China
*Wyeth Gallery C - 2nd Floor***6:00 p.m. – 6:45 p.m.**SIAM Business Meeting
Complimentary beer and wine will be served.
*Wyeth Gallery C - 2nd Floor***Tuesday, July 25****8:30 a.m. – 5:30 p.m.**Registration
*Wyeth Foyer - 2nd Floor***9:00 a.m. – 9:15 a.m.**Remarks
*Wyeth Gallery C - 2nd Floor***9:15 a.m. – 10:00 a.m.****IP2** Optimal Control: Old and New
Hélène Frankowska, Sorbonne Université, CNRS, France
*Wyeth Gallery C - 2nd Floor***9:30 a.m. – 4:30 p.m.**Exhibitor Hours
*Wyeth Foyer - 2nd Floor***10:00 a.m. – 10:30 a.m.**Coffee Break
*Wyeth Foyer - 2nd Floor***10:30 a.m. – 12:30 p.m.****Concurrent Sessions****MS19** Recent Developments in Control of Fluid Flows - Part III of III
*Wyeth Gallery C - 2nd Floor***MS20** Unconventional Control: Nonsmooth and Geometric Methods, Theory, and Novel Applications - Part I of II
*Wyeth Gallery A - 2nd Floor***MS21** Analysis and Control of Climatological and Biological Models - Part I of III
*Wyeth Gallery B - 2nd Floor***MS22** Control, Stability and Their Applications- Part III of III
*Whistler A - 2nd Floor***MS23** Optimality and Robustness in Path-Planning and Routing- Part III of III
Whistler B - 2nd Floor

Tuesday, July 25**MS24** Systems and Control - Part I of III*Homer- 2nd Floor***MS25** Dynamics and Control of Sweeping Processes- Part III of III*Hopper - 2nd Floor***MS26** Geometric Control Theory with Quantum and Classical Applications - Part I of III*Benton - 8th Floor***MS27** Estimation and Control of PDE Systems- Part III of III*Warhol - 8th Floor***12:30 p.m. – 2:00 p.m.**

Lunch Break

*Attendees on their own***2:00 p.m. – 4:00 p.m.****Concurrent Sessions****MS28** Data-Driven Decision Control for Complex Systems - Part I of II*Wyeth Gallery C - 2nd Floor***MS29** Unconventional Control: Nonsmooth and Geometric Methods, Theory, and Novel Applications- Part II of II*Wyeth Gallery A - 2nd Floor***MS30** Analysis and Control of Climatological and Biological Models- Part II of III*Wyeth Gallery B - 2nd Floor***MS31** Optimal Transport: Theory and Applications in Systems and Control*Whistler A - 2nd Floor***MS32** Nonlinear Control Systems Theory and Its Applications*Whistler B - 2nd Floor***MS33** Systems and Control - Part II of III*Homer- 2nd Floor***MS34** Mathematical and Computational Analysis of Evolution Equations and Fluid Structure Interaction Dynamics - Part I of II*Hopper - 2nd Floor***MS35** Geometric Control Theory with Quantum and Classical Applications - Part II of III*Benton - 8th Floor***CP1** New Paradigms for Control Designs*Warhol - 8th Floor***4:00 p.m. – 4:30 p.m.**

Coffee Break

*Wyeth Foyer - 2nd Floor***4:30 p.m. – 5:15 p.m.****IP3** Control and System Theory Methods in Neurostimulation

Eduardo Cerpa, Pontificia Universidad Católica de Chile, Chile

*Wyeth Gallery C - 2nd Floor***Tuesday, July 25****5:15 p.m. – 6:00 p.m.****PD2** Panel on the Future of Applied Math and Control Systems*Wyeth Gallery C - 2nd Floor***6:00 p.m. – 6:45 p.m.**

SIAG/CST Business Meeting

Complimentary beer and wine will be served .

*Wyeth Gallery C - 2nd Floor***Wednesday, July 26****8:30 a.m. – 5:30 p.m.**

Registration

*Wyeth Foyer - 2nd Floor***9:00 a.m. – 9:15 a.m.**

Closing Remarks

*Wyeth Gallery C - 2nd Floor***9:15 a.m. – 10:00 a.m.****IP4** Optimal Transport and Ambiguity Sets for Swarm Coordination

Sonia Martinez, University of California, San Diego, U.S.

*Wyeth Gallery C - 2nd Floor***9:30 a.m. – 4:30 p.m.**

Exhibitor Hours

*Wyeth Foyer - 2nd Floor***10:00 a.m. – 10:30 a.m.**

Coffee Break

*Wyeth Foyer - 2nd Floor***10:30 a.m. – 12:30 p.m.****Concurrent Sessions****MS36** Data-Driven Decision Control for Complex Systems - Part II of II*Wyeth Gallery C - 2nd Floor***MS37** Control Paradigm for Physiological Systems at Different Scales: Design of Synthetic Controllers*Wyeth Gallery A - 2nd Floor***MS38** CANCELLED**MS39** Neural Networks for Control and Estimation*Whistler A - 2nd Floor***MS40** Safe Learning and Control with Control Barrier Functions*Whistler B - 2nd Floor***MS41** Systems and Control - Part III of III*Homer- 2nd Floor***MS42** Mathematical and Computational Analysis of Evolution Equations and Fluid Structure Interaction Dynamics - Part II of II*Hopper - 2nd Floor***Wednesday, July 26****MS43** Geometric Control Theory with Quantum and Classical Applications - Part III of III*Benton - 8th Floor***12:30 p.m. – 2:00 p.m.**

Lunch Break

*Attendees on their own***2:00 p.m. – 4:00 p.m.****Concurrent Sessions****CP2** Reinforcement Learning*Wyeth Gallery C - 2nd Floor***CP3** Differential Games*Wyeth Gallery A - 2nd Floor***CP4** Biology and Medicine*Wyeth Gallery B - 2nd Floor***CP5** Optimal Control and Hamilton-Jacobi Equations*Whistler A - 2nd Floor***CP6** Multiagent, Traffic Models and Networks*Whistler B - 2nd Floor***CP7** Control and Systems Theory*Homer- 2nd Floor***CP8** Stochastic Processes*Hopper - 2nd Floor***CP9** Controllability and Stabilization*Benton - 8th Floor***CP10** Control of ODE and Dynamical Systems*Warhol - 8th Floor***4:00 p.m. – 4:30 p.m.**

Coffee Break

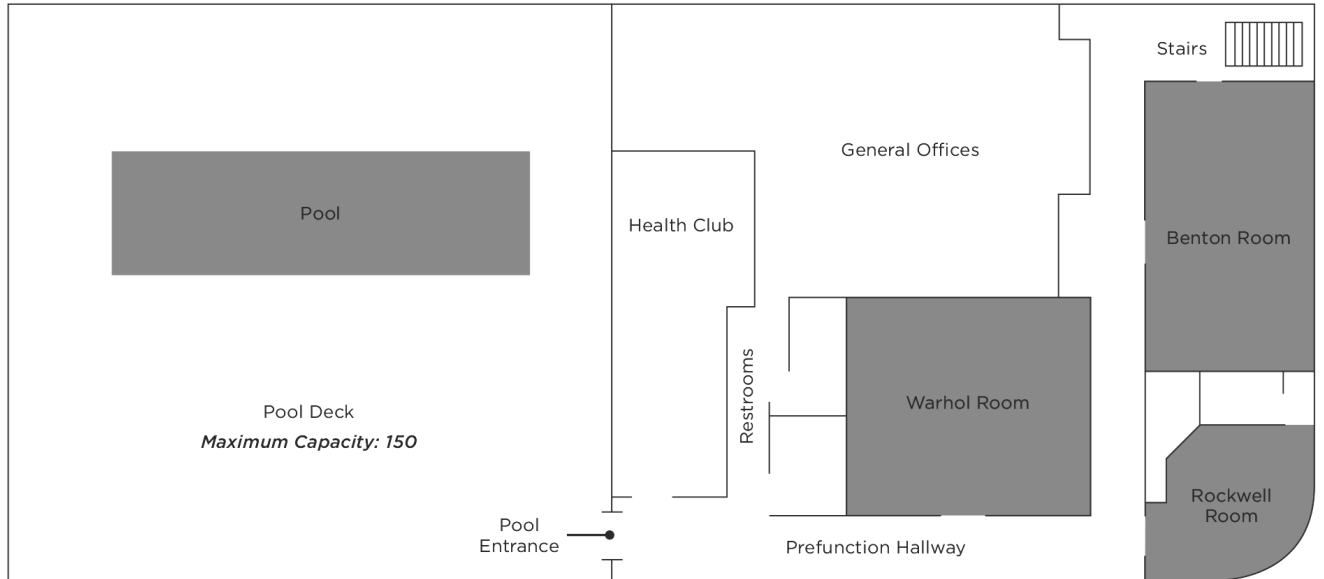
*Wyeth Foyer - 2nd Floor***4:30 p.m. – 5:15 p.m.****PD3** Control, Diversity and Inclusion*Wyeth Gallery C - 2nd Floor***5:15 p.m. – 5:45 p.m.****SP3** 2023 W.T. and Idalia Reid Prize Lecture - Duality and Free Boundaries for Optimal Nonlinear Pricing

Robert McCann, University of Toronto, Canada

*Wyeth Gallery C - 2nd Floor***Abbreviation Key****CP** = Contributed Presentation Session**IP** = Invited Plenary Speaker**MS** = Minisymposium**PD** = Panel Discussion**SP** = Special Lecture

Sonesta Philadelphia Rittenhouse Square Hotel

LEVEL EIGHT



* Not pictured on Level Eight room plan layout:
Pollock Room, Cassatt Room and Calder Room

LEVEL TWO

