

SIAM Conference on Control & Its Applications

**Tuesday,
July 7**

6:30 PM - 8:30 PM
Welcome Reception
Pre-registration required due to limited availability.
Off-site at Université Pierre et Marie Curie - Salle de Réception Tour Zamansky



Wednesday, July 8

8:00 AM - 7:00 PM
Registration
St. Germain

8:45 AM - 9:00 AM
Welcome Remarks
Jussieu

9:00 AM - 9:45 AM
IP1 Stochastic Target Problems
Halil Mete Soner, ETH Zürich, Switzerland
Jussieu

9:45 AM - 10:00 AM
Coffee Break
St. Germain and Lounge



10:00 AM - 12:00 PM
Concurrent Sessions
MS1 Stochastic Control, Dynamic Games and Applications - Part I of IV
Jussieu
MS2 New Directions in Optimal Control - Part I of IV: Application to Biomedical Systems
Saint-Victor
MS3 Mean Field Games - Part I of III
Odeon
MS4 Optimal Control of Multiphase Systems - Part I of II
Conseil
MS5 Optimal and Feedback Control of Partial Differential Equations - Part I of II
Descartes
MS6 Topics in Control of Switching Systems
Lutece
MS7 See Thursday 2:45 PM
MS8 Complexity Issues in Control Computation and Max-Plus Methods - Part I of II
Soufflot
MS9 Control and Systems Theory for Biological Systems
Poissy
MS10 Stochastic Control and its Applications
Pantheon
MS11 Control in Environment Problems
Cluny
MS12 Novel Approaches for Discrete Problems - Part I of II
Sully

**Wednesday,
July 8**

MS42 Advances in Optimal Control and Hamilton-Jacobi Equations: Approximation Methods
Pontoise
12:00 PM - 1:30 PM
Lunch Break
Attendees on their own

1:30 PM - 2:15 PM
IP2 A Convex Optimization Approach to Infinite-Dimensional Systems
Emilia Fridman, Tel Aviv University, Israel
Jussieu

2:15 PM - 2:30 PM
Intermission

2:30 PM - 4:30 PM
Concurrent Sessions
MS13 Stochastic Control, Dynamic Games and Applications - Part II of IV
Jussieu
MS14 New Directions in Optimal Control - Part II of IV: Constrained Problems and Applications
Saint-Victor

MS15 Mean Field Games - Part II of III
Odeon
MS16 Optimal Control of Multiphase Systems - Part II of II
Conseil
MS17 Optimal and Feedback Control of Partial Differential Equations - Part II of II
Descartes

MS18 Optimality and Regularity Conditions
Lutece
****MS19** Mean Fields Games: Applications and Numerics
Pontoise
MS20 Complexity Issues in Control Computation and Max-Plus Methods - Part II of II
Soufflot

MS21 Control and Estimation for Complex Systems
Poissy
MS22 New Perspectives on Regime-switching Models: Theory and Applications
Pantheon
MS23 Stability Analysis and Control of Fractional Differential Systems
Cluny

MS24 Novel Approaches for Discrete Problems - Part II of II
Sully
4:30 PM - 5:00 PM
PP1 Coffee Break and Poster Session
Posters will be on display during all afternoon coffee breaks
St. Germain and Lounge



**Wednesday,
July 8**

5:00 PM - 7:00 PM
Concurrent Sessions
CP1 Controllability and Observability, I
Jussieu
CP2 Stabilization, Stability, and Robustness, I
Saint-Victor
CP3 Control Systems; Optimal Control, I
Odeon
CP4 Stochastic Systems; Risk Sensitive Control, I
Conseil

CP5 Numerical Analysis and Methods, I
Descartes
CP6 Control and Identification of Distributed Parameter Systems, I
Lutece
CP7 Control of Biological Systems, I
Pontoise

CP8 Control on Network Domains
Soufflot
CP9 Partial Differential Equations; Control
Poissy
CP10 Computation and Control
Pantheon
CP11 Cooperative Control
Cluny

CP12 Optimization and Operations Research
Sully

Thursday, July 9

9:00 AM - 5:00 PM
Registration
St. Germain

9:00 AM - 9:30 AM
SP1 W.T. and Idalia Reid Prize in Mathematics
Lecture: Definitions and Hypotheses and All That Stuff
Francis Clarke, Université Claude Bernard Lyon 1, France
Jussieu

9:30 AM - 10:15 AM
SP2 SIAG/CST Prize Lecture - Control of Higher Order PDEs: KdV and KS Equations
Eduardo Cerpa, Universidad Técnica Federico Santa María, Chile
Jussieu

10:15 AM - 10:30 AM
Coffee Break
St. Germain and Lounge



10:30 AM - 12:30 PM
Concurrent Sessions
MS25 Stochastic Control, Dynamic Games and Applications - Part III of IV
Jussieu

**Thursday,
July 9**

MS26 New Directions in Optimal Control - Part III of IV: Modeling and Numerical Approaches
Saint-Victor
MS27 Mean Field Games - Part III of III
Odeon
MS28 Reduced-Order Modeling for Design and Control of PDEs - Part I of II
Conseil

MS29 Dynamic Games and Operators - Part I of II
Descartes
MS30 Sensitivity Relations and Optimality Conditions in Optimal Control
Lutece
MS31 Optimal Control with Applications to the Energy Sector
Pontoise

MS32 Smart Grid Problems - Part I of II
Soufflot
****MS33** Moreau Sweeping Processes and Problems with Interval-valued Objective Functions
Poissy
****MS34** Numerical Optimal Control and Hamilton-Jacobi Equations
Pantheon

MS35 Analysis and Control of Systems with Parametric Uncertainty
Cluny
****MS36** Stochastic Systems and Applications
Sully

12:30 PM - 2:00 PM
Lunch Break
Attendees on their own

12:45 PM - 1:45 PM
PD1 Forward Looking Panel Discussion
Jussieu
1:45 PM - 2:30 PM
IP3 Simple Distributed Control of Networked Systems: Learning, Direct and Indirect Communications
John Baras, University of Maryland, USA
Jussieu

2:30 PM - 2:45 PM
Intermission
2:45 PM - 4:45 PM
Concurrent Sessions
MS7 Advances in Optimal Control and Hamilton-Jacobi Equations: Computational Approaches
Lutece

MS37 Stochastic Control, Dynamic Games and Applications - Part IV of IV
Jussieu
MS38 New Directions in Optimal Control - Part IV of IV: Sufficient Conditions for Optimality
Saint-Victor

**Thursday,
July 9**

MS39 Control and Estimation of PDE Systems
Odeon
MS40 Reduced-Order Modeling for Design and Control of PDEs - Part II of II
Conseil
MS41 Dynamic Games and Operators - Part II of II
Descartes

MS42 See Wednesday 10:00 AM
MS43 Second-order Conditions for Optimal Control Problems
Pontoise
MS44 Smart Grid Problems - Part II of II
Soufflot
MS45 Control Problems Related to Hyperbolic Equations
Poissy

MS46 Observation and Control of Distributed Parameter Systems: Numerical Approximations and Control Design
Pantheon
MS47 Set-valued Approaches to Control Problems with Applications in Traffic Flow Modeling
Cluny
MS48 Estimation and Control of Stochastic Systems
Sully

4:45 PM - 5:15 PM
Coffee Break and Poster Session
St. Germain and Lounge



5:15 PM - 6:00 PM
IP4 Irreversibility in Dynamic Optimization
Piermarco Cannarsa, University of Rome II, Tor Vergata, Italy
Jussieu

6:15 PM - 7:00 PM
SIAG/CST Business Meeting
Jussieu



Friday, July 10

9:00 AM - 5:00 PM
Registration
St. Germain

9:00 AM - 9:45 AM
IP5 Hybrid Processes for Controlling Manufacturing Systems
Dawn Tilbury, University of Michigan, USA
Jussieu
9:45 AM - 10:00 AM
Coffee Break
St. Germain and Lounge



**Friday,
July 10**

10:00 AM - 12:00 PM
Concurrent Sessions
MS49 Advances in Optimal Control and Hamilton-Jacobi Equations: Regularity and Homogenization
Lutece
MS50 Switched Systems and Applications
Pontoise

MS51 Quantum Control - Part I of II
Soufflot
MS52 Computational Approaches to Large-scale Stochastic Control Problems
Poissy
MS53 Machine Learning Methods to Control Complex Systems - Part I of II
Pantheon

MS54 Koopman Operator Theoretic Methods in Systems and Control
Cluny
MS55 Nonsmooth and Variational Techniques in Control
Sully

CP13 Stabilization, Stability, and Robustness, II
Saint-Victor
CP14 Control Systems; Optimal Control, II
Odeon
CP15 Stochastic Systems; Risk Sensitive Control, II
Conseil

CP16 Numerical Analysis and Methods, II
Descartes
10:00 AM - 10:20 AM
SICON Paper Prize Lecture #1
10:30 AM - 10:50 AM
SICON Paper Prize Lecture #2
Jussieu

12:00 PM - 1:30 PM
Lunch Break
Attendees on their own
1:30 PM - 2:15 PM
IP6 Averaged Control
Enrique Zuazua, Basque Center of Applied Mathematics, Spain
Jussieu

2:15 PM - 2:30 PM
Intermission

SIAM Conference on Control & Its Applications At-A-Glance



Friday, July 10

2:30 PM - 4:30 PM

Concurrent Sessions

MS56 Analysis and Control of Hypoelliptic Diffusion
Jussieu

MS57 Extremal Norms for Switched Systems
Saint-Victor

MS58 Optimal Actuator/Sensor Location for Distributed Parameter Systems
Odeon

****MS59** Boundary Controlled Distributed Parameter Systems and their Approximation
Conseil

MS60 Model Upscaling and Dimension Reduction with Applications to Biology and Materials Science
Descartes

MS61 Controls, Optimization and Estimation for Building Energy Management
Lutece

****MS62** Infinite Horizon Optimal Control
Pontoise

MS63 Quantum Control - Part II of II
Soufflot

MS64 Risk-Averse Control of Markov Systems
Poissy

MS65 Machine Learning Methods to Control Complex Systems - Part II of II
Pantheon

MS66 Limit Cycles in Anti-lock Braking Systems (ABS)
Cluny

MS67 Optimal Control Problems in Industrial Applications
Sully

4:30 PM - 5:00 PM

Coffee Break and Poster Session
St. Germain and Lounge



Friday, July 10

5:00 PM - 7:00 PM

Concurrent Sessions

CP17 Controllability and Observability, II
Jussieu

CP18 Stabilization, Stability, and Robustness, III
Saint-Victor

CP19 Control Systems; Optimal Control, III
Odeon

CP20 Stochastic Systems; Risk Sensitive Control, III
Conseil

CP21 Numerical Analysis and Methods, III
Descartes

CP22 Control and Identification of Distributed Parameter Systems, II
Lutece

CP23 Control of Biological Systems, II
Pontoise

CP24 Game Theory
Soufflot





CP25 Dynamical Systems; Uncertain Systems
Poissy

CP26 Robustness, Control and Uncertainties
Pantheon

CP27 Nonlinear Filtering, Information, Communication and Signals
Cluny

CP28 Control of Fluids and Control Systems
Sully

Key to abbreviations and symbols

-  = Poster Session
-  = Business Meeting
-  = Coffee Break
-  = Refreshments
- IP = Invited Plenary Speaker
- CP = Contributed Presentation
- MS = Minisymposium
- SP = Special Lecture
- ** = Extended Session