Wednesday, October 19, 2022

12:00 AM - 1:00 AM EDT	Welcome Message
12:00 AM - 1:00 AM	Welcome Message from the CSS-Day Task Force

2:00 AM - 3:30 AM EDT	Technology Showcase 1: Robotics And Control Chair: **Joao Hespanha**
2:00 AM - 2:30 AM	**Magnus Egerstedt** "Robot Ecology: Control Design For Long Duration Autonomy"
2:30 AM - 3:00 AM	**Kristin Pettersen** "Snake Robots"
3:00 AM - 3:30 AM	**Wei Zhang** "Control And Learning For Legged Locomotion"

4:00 AM - 5:00 AM EDT	IEEE CSS Kansai Chapter Chair: **Toshiyuki Ohtsuka**
4:00 AM - 5:00 AM	**Kai Cai** "Congruences And Quotients: A Model-Independent Structural Approach In Systems And Control"

4:30 AM - 5:30 AM EDT	IEEE CSS Italy Chapter: Roberto Tempo Colloquium Chair: **Fabrizio Dabbene**
4:30 AM - 5:30 AM	**Tamer Basar** "Consensus And Dissensus In Multi-Population Multi-Agent Systems"

8:00 AM - 9:00 AM EDT	Presidents' Forum Chair: **Thomas Parisini**

8:00 AM - 9:00 AM	**Tamer Basar, Christos Cassandras, Jay Farrell, Richard Middleton, Maria Elena Valcher** "The Future Of CSS Conferences And Publications"

9:00 PM - 10:00 PM EDT	IEEE Joint Chapter Controls, Robotics, Cybernetics Vancouver Section (I) Chair: **Ryozo Nagamune**
9:00 PM - 10:00 PM	**Brett Henkel** "Svante Capture Technology, Business Model, And Projects"

Thursday, October 20, 2022

5:00 AM - 11:00 AM EDT	IEEE Kharagpur Control Systems Chapter Chair: **Ashish R. Hota**
5:00 AM - 6:00 AM	**M. Vidyasagar** "Sixty Years Of Control Theory In Sixty Minutes And Sixty Slides"
6:00 AM - 7:00 AM	**Shalabh Bhatnagar** "Q-Learning And Its Variants For The Single And Multi-Agent Setting"
9:00 AM - 10:00 AM	**Nikhil Chopra** "Adaptive Gradient Optimizer In Machine Learning: A Control Theoretic Perspective"
10:00 AM - 11:00 AM	**Francesco Bullo** "Contraction Theory For Network Systems"

8:20 AM - 11:00 AM EDT	IEEE CSS Italy Chapter: Challenges In Robust And Complex Systems - CROCS2022 Chair: **Fabrizio Dabbene**
8:30 AM - 8:55 AM	**Luca Zaccarian** "Robust Stabilizing Controllers With Robust Avoidance Properties (For Linear Systems With Nontrivial Drift)"
8:55 AM - 9:20 AM	**Dimitri Peaucelle** "Discussion On S-Variable Based Static-Output Feedback Design Heuristics"
9:20 AM - 9:45 AM	**Constantino Lagoa** "Efficient Algorithms For Risk Minimization"
10:10 AM - 10:35 AM	**Teodoro Álamo** "Aggressive Probabilistic Certification Of Complex Control Systems"
10:35 AM - 11:00 AM	**Chiara Ravazzi** "Centrality Estimation In Fringe Social Networks: A Control Systems Approach"

11:00 AM - 12:00 PM EDT	Control History Forum (I) Chair: **Alberto Isidori**
11:00 AM - 11:30 AM	**John Baillieul** "An Interview With R. Brockett"
11:30 AM - 12:00 PM	**Tamer Basar** "Games, Decisions, And Control: Past, Present, And Future"

9:00 PM - 10:00 PM EDT	IEEE Joint Chapter Controls, Robotics, Cybernetics Vancouver Section (II) Chair: **Ryozo Nagamune**
9:00 PM - 10:00 PM	**Kourosh Malek** A Data-Driven Approach For Value Analysis Of Emerging Grid-Scale Storage Technologies

Register Now ! Link: http://ieeecss.org/css-day-2022

Friday, October 21, 2022

3:00 AM - 4:00 AM EDT	**YP And Industry Panel (I)** Chair: **Rush Patel**
3:00 AM - 4:00 AM	**O.D. Naidu, Debora Clever, Lidia Auret, Niklas Karlsson** "A Day In The Life' Of Controls Engineering Practitioners"
9:00 AM - 10:00 AM EDT	**Technology Showcase 2: Intelligent Transportation** Chair: **Jing Sun**
9:00 AM - 9:30 AM	**Alex Bayen** "Applications Of Reinforcement Learning And Optimal Control To Mixed Autonomy Traffic"
9:30 AM - 10:00 AM	**Huei Peng** "Control Of Intelligent Transportation Systems"
10:00 AM - 11:30 AM EDT	**Control History Forum (II)** Chair: **Alberto Isidori**
10:00 AM - 10:45 AM	**Lei Guo** "Revisiting Self-Tuning Regulators"
10:45 AM - 11:00 AM	**Rolf Isermann** "Mechatronic Systems: Past, Present, Future"
9:00 PM - 10:00 PM EDT	**YP And Industry Panel (II)** Chair: **Rush Patel**
9:00 PM - 10:00 PM	**Kerry Sun, Kaivalya Bakshi, Megan Emmons, Niklas Karlsson** "A Day In The Life' Of Controls Engineering Practitioners"

Monday, October 24, 2022

9:00 AM - 10:00 AM EDT	**Technology Showcase 3: Automotive** Chair: **Mara Tanelli**
9:00 AM - 9:30 AM	**Stefano Di Cairano** "The Long Voyage Towards Autonomous Driving, With Control Systems As The Co-Pilot"
9:30 AM - 10:00 AM	**Maarten Steinbuch, Mauro Salazar, Theo Hofman** "From The Engine To The Battery, A Twenty-Year Powertrain Electrification Journey"
10:00 AM - 11:30 AM EDT	**Control History Forum (III)** Chair: **Alberto Isidori**
10:00 AM - 10:45 AM	**Stephen Morse** "Geometric Methods For Control"
10:45 AM - 11:30 AM	**Arthur Krener** "Geometric Concepts In Nonlinear Control"

Tuesday, October 25, 2022

3:00 AM - 4:00 AM EDT	**Technology Showcase 4: Control For Societal-Scale Challenges - Roadmap 2030** Chair: **Thomas Parisini**
3:00 AM - 4:00 AM	**Anuradha Annaswamy, Karl Johansson, George Pappas** "Control For Societal-Scale Challenges - Roadmap 2030"

8:00 AM - 12:30 PM EDT	**IEEE Switzerland Section CSS Chapter NCCR Symposium On Socially Responsible Automation** Chair: **Giancarlo Ferrari Trecate**
8:20 AM - 9:00 AM	**Anuradha Annaswamy** "Cyber-Physical-Human Systems And Social Responsibility"
9:00 AM - 9:40 AM	**Emilio Frazzoli** "A Karma Economy For Socially Efficient And Equitable Autonomy"
10:10 AM - 10:50 AM	**Sarah Dean** "Feedback, Dynamics, And Safety In Machine Learning Systems"
10:50 AM - 11:30 AM	**David Shaw** "Developing Socially Responsible Rules Of The Road: Justice, Utility And Vulnerability In AV Decision-Making"
10:00 AM - 11:30 AM EDT	**Control History Forum (IV)** Chair: **Alberto Isidori**
10:00 AM - 10:30 AM	**Eduardo Sontag** "The ISS Philosophy As A Unifying Framework For Stability-Like Behavior Of Input/Output Systems"
10:30 AM - 11:00 AM	**Arjan van der Schaft** "The Legacy Of Jan Willems"
11:00 AM - 11:30 AM	**Yutaka Yamamoto** "R.E. Kalman's Legacy And Sampled-Data Control"

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