



Leonid Fridman during the opening ceremony.

VSS18 featured five sessions focusing on sliding mode theory, four sessions on applications, two poster sessions, and three plenary talks:

- » “Homogenous Sliding Mode Control and Observation,” by Jaime A. Moreno, Universidad Nacional Autonoma de Mexico, Mexico City
- » “Sliding Mode Control and Observation in Aerospace Systems,” by Yuri B. Shtessel, University of Alabama at Huntsville
- » “Sliding Mode Control: From Theory into Practice,” by Martin

Horn, Graz University of Technology, Austria.

In 2020, the workshop will take place in Rio de Janeiro, Brazil, and is being organized by Tiago Roux Oliveira and Liu Hsu. Following the tradition of the VSS community, a summer school on sliding mode control will also be organized in 2019 in Rio de Janeiro.

Martin Steinberger
Martin Horn
Leonid Fridman

CPAR Control Theory and Automation Symposium

The People and Robots Initiative at the Center for Information Technology Research in the Interest of Society (CITRIS) and the Banatao Institute, along with the Cyber-Physical Systems Research Center (CPSRC), organized a Control Theory and Automation Symposium at the University of California (UC), Santa Cruz campus on 27 April 2018. This symposium kicked off the First NorCal Control Workshop, which is an annual event providing a forum to bring together students, postdoctoral associates, and faculty from various universities as well as representatives from industries in the Northern California region.

The single-track technical program featured two keynote talks, ten talks by students and postdoctoral associates, a panel



The registration station.

discussion, and student poster sessions. The event was organized by Abhishek Halder and Ricardo Sanfelice from UC Santa Cruz and Ken

Goldberg and Ron Berenstein from UC Berkeley, with help from staff members from CITRIS and CPSRC. The event drew nearly 80 participants from industry and academia, including Optimal Synthesis Inc., the Naval Postgraduate School, Siemens, Stanford University, UC Berkeley, UC Davis, UC Merced, and UC Santa Cruz.

Opening remarks were delivered by the dean of the Baskin School of Engineering at UC Santa Cruz. Talks by graduate students and postdoctoral associates followed. Two keynote presentations, one from industry and one from academia, were presented before and after lunch. These presentations were of a tutorial nature, providing a broad overview and research scopes in the

respective topical areas. The industry keynote talk, “Dynamics and Control of Air Traffic,” was delivered by P.K. Menon, chief scientist and



Student speaker Erik Kiser from the Naval Postgraduate School delivering his talk.

chief executive of Optimal Synthesis Inc., an aerospace research and development company he founded in 1992. After lunch and a poster session, the academia keynote talk, “Computational Issues in Nonlinear Control and Estimation,” was delivered by Arthur J. Krener, a research professor at the Naval Postgraduate School. In total, ten technical talks were delivered by graduate students and post-doctoral associates.

A panel discussion, “Emerging Trends and Future Directions in Control Theory and Automation,” followed the keynotes and talks. Moderated by Abhishek Halder and Ricardo Sanfelice, the panel consisted of Juan Aparicio from Siemens, Murat Arcak from UC Berkeley, Stefano Carpin from UC Merced, Art Krener, Sanjay Lall from Stanford University, and P.K. Menon. The panel sparked discussions on key challenges in the development of control and automation solutions to the complex problems of today as well as finding unique future opportunities and problems where systems, robotics, control, and automation would play a key role. The event wrapped with a poster session and networking dinner.

The technical program is available at the event website <https://norcal-control.github.io/>. This one-day event received overwhelmingly positive feedback from participants and was successful

in meeting its objectives: bringing together researchers and students in the region to network and presenting their technical works in a relaxed and intimate environment. The NorCal Control Workshop will become an annual event

organized by different campuses in the Northern California region.

Abhishek Halder
Ricardo G. Sanfelice



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