

15th International Workshop on Variable Structure Systems and Sliding Mode Control

The 15th International Workshop on Variable Structure Systems and Sliding Mode Control (VSS18) was held July 9–11, 2018 at Graz University of Technology, Austria. The organizer was Martin Steinberger (program chair and chair of the local organizing committee), Martin Horn (general cochair), and Leonid Fridman (general cochair). It was co-sponsored by the IEEE Control Systems Society (CSS) and supported by the CSS Technical Committee on Variable Structure and Sliding Mode Control.

The VSS workshop series has a 28-year history, is the principal event in variable structure systems and slid-

ing mode control, and attracts attendees from both academia and industry. VSS18 received 111 submissions from 30 countries, which is the largest number

of submissions in the workshop history. All submissions went through a double-blind review process with at least two reviewers per paper.



Discussions during the coffee break.

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A snapshot of the City of Graz inscribed into the UNESCO world heritage site (photo courtesy of Graz Tourismus - Harry Schiffer).



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