



NEW CHALLENGES IN NONLINEAR AND HYBRID CONTROL SYSTEMS

Workshop in honor of Maria Domenica Di Benedetto

June 5th-6th, 2025

Centro Congressi Zordan – L'Aquila

PROGRAM

JUNE 5TH

- 14:30** Opening - Institutional welcome
- 15:00** The Rank Invariants of an invertible MIMO nonlinear system are the only data needed to robustly Almost Feedback Linearize a system
Alberto Isidori
Sapienza University of Rome
- 15:30** From Common Grounds to New Horizons: Tracing Paths in Nonlinear and Hybrid Systems Control
Jessy Grizzle
University of Michigan
- 16:00** Observer Synthesis for Nonlinear Systems via Physics-Informed Learning
Karl Henrik Johansson
KTH Royal Institute of Technology
- 16:30** Coffee break
- 17:00** Formal Methods in Control: From Verification to Synthesis to Testing (and Beyond)
Richard M. Murray
California Institute of Technology
- 17:30** Algebra and Nonlinear Control Systems Analysis
Claude Moog
Nantes Université
- 20:30** Gala Dinner

JUNE 6TH

- 9:30** Data driven control of urban traffic systems
John Lygeros
ETH Zurich
- 10:00** Embodied Intelligence: From Cyber Physical Systems to Neuro Symbolic Reasoning
S. Shankar Sastry
University of California at Berkeley
- 10:30** Coffee break
- 11:00** Sharing memories
Hybrid Systems in Automotive Applications: Starting a Successful Academic-Industrial Collaboration
Andrea Balluchi
Pure Power Control s.r.l.
Luca Benvenuti
Sapienza University of Rome
- Scheduled informal contributions
- 13:00** Closing
- 13:30** Light Lunch
- 15:30** L'Aquila City tour