

Program DISC Summer School

A Systems and Control Perspective in Human-Robot-Environment Interaction

Center Parcs, Zandvoort, The Netherlands, June 14-17, 2016

Tuesday June 14, 2016

08.45 – 10.15 Registration
10.15 – 10.30 Organisers
10.30 – 12.00 Bruno Siciliano (1)

12.00 – 13.15 Lunch
13.15 – 14.45 Roy Featherstone
14.45 – 15.00 Break
15.00 – 16.30 Bruno Siciliano (2)
16.30 – 16.45 Break
16.45 – 18.15 Tutorials
18.15 – 20.00 Dinner

Robot Dynamics and Control

Opening Summer School
Past, Present, and Future of Robotics /Applications and Challenges

Robot Multi-Body Dynamics Modeling

Task space control / Control of Redundant Manipulators

Practice and exchange your ideas with the expert

Wednesday June 15, 2016

08.45 – 10.15 Arjan van der Schaft
10.15 – 10.30 Break
10.30 – 12.00 Stefano Stramigioli
12.00 – 13.15 Lunch
13.15 – 14.45 Aaron Ames
14.45 – 15.00 Break
15.00 – 16.30 Tutorials
16.30 – 16.45 Break
16.45 – 18.15 DISC Researchers
18.15 – 20.00 Dinner

Manipulation and Locomotion

Passivity-based Control and Port Hamiltonian Formalism

Impedance Control and Variable Stiffness Actuation

Hybrid Systems formalisms for Impact Robotics: Bipedal Walking

Practice and exchange your ideas with the expert

Short pitches about DISC robotic research

Thursday June 16, 2016

08.45 – 10.15 Jorge Cortés
10.15 – 10.30 Break
10.30 – 12.00 Ming Cao
12.00 – 13.15 Lunch
13.15 – 14.45 Bert Kappen
14.45 – 15.00 Break
15.00 – 16.30 Tutorials
16.30 – 16.45 Break
16.45 – 18.15 PhD students
18.15 – 20.00 Dinner

Robotic Networks

Distributed Control of Robotic Networks

Graph Theory applications in the control of robotic networks

Stochastic Control Theory in robotic applications

Practice and exchange your ideas with the expert

Poster session on DISC robotic research

Friday June 17, 2016

08.45 – 10.15 Cristian Secchi
10.15 – 10.30 Break
10.30 – 12.00 David Abbink
12.00 – 13.15 Lunch
13.15 – 14.45 Tutorials
14.45 – 15.00 Closing

Tele-robotics

Telerobotics / Control of Multiple Aerial Vehicles

Haptics

Practice and exchange your ideas with the expert