

Announcement

**DISC Summer School**  
**Data-driven Modeling for Control**

**Centerparcs park Zandvoort, Zandvoort, The Netherlands**  
**June 16-19, 2014**

**Invitation**

The organizers have the pleasure to invite you to participate in the DISC Summer School on "Data-driven Modelling for Control", which is scheduled to take place from June 16-19, 2014, at "Centerparcs park Zandvoort", Zandvoort, The Netherlands.

The invitation is aimed at research students and staff members of DISC, and other researchers and engineers engaged in the systems and control area. Distinguished speakers will each present a series of tutorial lectures.

The field of dynamic modeling on the basis of measurement data (or system identification) has developed towards a mature field with well-established basic methods and tools, and with applications in a wide range of fields in science and engineering. However, whereas the classical problem for relatively simple (linear time-invariant) systems has been explored extensively, many questions remain when extending the class of systems to more complex (nonlinear) cases, or when addressing questions on (optimal) experiment design for particular modeling goals, model accuracy bounds, as well as when considering structured models in terms of physical, closed-loop or network structures.

In this 4-day summer school attention will be given to the current status of and modern developments in the area of data-driven modeling for control.

Particular attention will be given to:

- A historical positioning of the field
- Bias/variance trade-offs in parametric and non-parametric modeling
- Regularization and Bayesian methods
- Experiment design and goal oriented identification
- Structured systems
- Frequency domain methods and nonlinearities
- Subspace methods
- Linear parameter-varying models

**Lecturers**

The main program will consist of various speakers. Keynote lectures will be given by:

- **Prof. Michel Gevers, Université Catholique de Louvain, Louvain-la-Neuve and Free University Brussels, Belgium**
- **Prof. Lennart Ljung, University of Linköping, Sweden**
- **Prof. Håkan Hjalmarsson, KTH - Royal Institute of Technology, Stockholm**
- **Prof. Alessandro Chiuso, University of Padova, Italy**
- **Prof. Johan Schoukens, Free University, Brussels, Belgium**

to be complemented with contributions from the DISC community.

**Registration**

The registration fee, which includes boarding and lodging, is  
1000,- Euro for non-DISC members  
800,- Euro for DISC-students and DISC-members

The school is limited to 60 participants based on a first-come first-serve policy. The registration deadline is June 1, 2013.

You can register at the following website: <https://disc-forum.nl>. Non DISC members can also send an email to: [secre@disc.tudelft.nl](mailto:secre@disc.tudelft.nl) for registration. (Please mention your full name and university including address).

For further information, please contact the DISC administrative office: Saskia van der Meer ([s.m.vandermeer@tudelft.nl](mailto:s.m.vandermeer@tudelft.nl)) or the organizers: Paul Van den Hof ([p.m.j.vandenhof@tue.nl](mailto:p.m.j.vandenhof@tue.nl)), Roland Toth ([r.toth@tue.nl](mailto:r.toth@tue.nl)), Tom Oomen ([t.a.e.oomen@tue.nl](mailto:t.a.e.oomen@tue.nl)) and Xavier Bombois ([x.j.a.bombois@tudelft.nl](mailto:x.j.a.bombois@tudelft.nl)).