# Davide M. Raimondo

#### PERSONAL INFORMATION

Born: 07-11-1981 in Pavia (Italy)

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Email: davide.raimondo@unipv.it

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## **LANGUAGES**

*Italian*: mother tongue. *English*: proficient. *Spanish*: fluent. *German*: basic knowledge. **Serbo-Croatian**: basic knowledge.

#### **RESEARCH INTERESTS**

*Theory:* control, fault detection and isolation, optimization. *Applications:* energy, medical, robotics, logistics.

## **BIBLIOMETRIC PROFILE**

Davide M. Raimondo currently (October 15, 2018) has an hindex of 20 (Scopus) - 25 (Google Scholar) and a number of citations equal to 1744 (Scopus) - 2714 (Google Scholar). 1

#### **EDUCATION**

Nov. 05 – Nov. 08	UNIVERSITY OF PAVIA  Ph.D. in electronic, computer and electrical engineering, Identification and Control of Dynamical Systems Laboratory, Thesis title: Nonlinear Model Predictive Control: Stability, Robustness and Applications. Advisor: Prof. Lalo Magni (Ph.D. thesis defended on January 16, 2009)	Pavia <i>Italy</i>
Oct. 03 – Jul. 05	UNIVERSITY OF PAVIA <i>M.Sc.</i> in Automatic Control Engineering. 110/110 cum laude	Pavia <i>Italy</i>
Oct. 00 – Sep. 03	UNIVERSITY OF PAVIA <b>B.Sc.</b> in Computer Science Engineering.  110/110 cum laude	Pavia <i>Italy</i>
Nov. 00 – Jul. 05	ALMO COLLEGIO BORROMEO <b>Student.</b> Recognized by the Italian Ministry of Education, University and Research as a "Highly qualified cultural institute".	Pavia <i>Italy</i>

<sup>1</sup> According to Google Scholar Metrics, the top journals in the field of Automation & Control Theory are Automatica (impact factor 3.635) and IEEE Transactions on Automatic Control (impact factor 2.777).

Nov. 00 – Nov. 05	INSTITUTE FOR ADVANCED STUDY OF PAVIA (IUSS) <b>Student.</b> Recognized by the Italian Ministry of Education, University and Research as a Superior Graduate Schools with "University Status".	Pavia <i>Italy</i>
ACADEMIC AND RE	SEARCH APPOINTMENTS	
May 15 –	UNIVERSITY OF PAVIA  Associate Professor at the Identification and Control of Dynamical Systems Laboratory, Department of Electrical, Computer and Biomedical Engineering	Pavia <i>Italy</i>
Jan. 13 –	UNIVERSITY OF PAVIA <b>Head</b> of the educational Process Control Laboratory, Department of Electrical, Computer and Biomedical Engineering	Pavia <i>Italy</i>
Jul. 18 – Sep 18	UNIVERSITY OF KONSTANZ  Visiting Professor, Department of Mathematics and Statistics, University of Konstanz	Konstanz Germany
Oct. 17 – Feb 18	UNIVERSITY OF KONSTANZ  Visiting Professor, Department of Mathematics and Statistics, University of Konstanz	Konstanz <i>Germany</i>
Dec. 10 – May 15	UNIVERSITY OF PAVIA  Assistant Professor (tenured 29/12/2013) at the Identification and Control of Dynamical Systems Laboratory, Dept. of Electrical, Computer and Biomedical Engineering	Pavia <i>Italy</i>
Mar. 15 – Apr. 15	VIENNA UNIVERSITY OF TECHNOLOGY (TU WIEN) Visiting Professor, Computer Engineering PhD School	Vienna <i>Austria</i>
Mar. 14 – Apr. 14	VIENNA UNIVERSITY OF TECHNOLOGY (TU WIEN) Visiting Professor, Computer Engineering PhD School	Vienna <i>Austria</i>
Jan. 09 – Dec. 10	SWISS FEDERAL INSTITUTE FOR TECHNOLOGY (ETHZ) <b>Postdoc</b> at the Automatic Control Laboratory  Dept. of Information Technology and Electrical Engineering	Zürich Switzerland
Nov. 08 – Dec. 08	SWISS FEDERAL INSTITUTE FOR TECHNOLOGY (ETHZ) Employee at the Automatic Control Laboratory Dept. of Information Technology and Electrical Engineering	Zürich Switzerland
Jul. 07 – Jan. 08	UNIVERSITY OF PAVIA Contracted for the development of predictive control techniques for biological applications	Pavia <i>Italy</i>
Sep. 05 – Nov. 05	UNIVERSITY OF PAVIA Contracted for the Development of robust model predictive controllers for nonlinear systems.	Pavia <i>Italy</i>

## **RESEARCH STAYS**

Oct. 15 – Nov. 15	MASSACHUSETTS INSTITUTE OF TECHNOLOGY (MIT) Prof. Braatz group, Department of Chemical Engineering	Cambridge <i>USA</i>
Jan. 15 – Feb. 15	MASSACHUSETTS INSTITUTE OF TECHNOLOGY (MIT)  Visiting scholar in Prof. Braatz group, Department of Chemical Engineering	Cambridge <i>USA</i>
Sep. 14 – Nov. 14	MASSACHUSETTS INSTITUTE OF TECHNOLOGY (MIT) <b>Visiting scholar</b> in Prof. Braatz group, Department of Chemical Engineering	Cambridge <i>USA</i>
Mar. 14 – May. 14	VIENNA UNIVERSITY OF TECHNOLOGY (TU WIEN) Institute of Computer Engineering	Vienna <i>Austria</i>
Aug. 13 – Sep. 13	MASSACHUSETTS INSTITUTE OF TECHNOLOGY (MIT)  Visiting scholar in Prof. Braatz group, Department of Chemical Engineering	Cambridge <i>USA</i>
Mar. 12 – Jun. 12	MASSACHUSETTS INSTITUTE OF TECHNOLOGY (MIT) <b>Visiting scholar</b> in Prof. Braatz group, Department of Chemical Engineering	Cambridge <i>USA</i>
Oct. 06 – May 07	UNIVERSITY OF SEVILLE <b>Academic Guest</b> in the Department of Automation and System Engineering	Sevilla <i>Spain</i>

## **AWARDS**

**Automatica Paper Prize Award 2014-2016** for Constrained zonotopes: A new tool for set-based estimation and fault detection, J.K. Scott, D.M. Raimondo, G.R. Marseglia, R.D. Braatz, Automatica, 69, 126-136, 2016.

# **QUALIFICATIONS**

Oct. 18	Qualified at the national level (national scientific habilitation) for the position of Full Professor, section 09/G1 Automatica	Italy
Jan. 14	Qualified at the national level (national scientific habilitation) for the position of Associate Professor, section 09/G1 Automatica	Italy
Nov. 05	UNIVERSITY OF PAVIA Professional practice exam ("esame di stato") for engineering license passed in Pavia, Italy.	Pavia <i>Italy</i>

## **PROJECTS AND FUNDING**

## European Projects

• SEMI40 (2016-2019) *Power Semiconductor and Electronics Manufacturing 4.0* H2020-EU.2.1.1.7. – ECSEL (EU Contribution to UNIPV Unit: 150K€) Role: participant

- AP@HOME (2010-2014) Bringing the Artificial Pancreas Home
   EU's Seventh Framework Programme (EU Contribution to UNIPV Unit: ~500K€)
   Role: participant
- IMPROVE (2009-2012) Implementing manufacturing science solutions to increase equipment productivity and fab performance
   European Nanoelectronics Initiative Advisory Council Role: participant
- FEEDNETBACK (2008-2011)
   EU's Seventh Framework Programme
   Role: participant

## **Italian Projects**

- PRIN project, Ministry of University and Scientific Research and Technology, Italy Forget Diabetes: Adaptive Physiological Artificial Pancreas (FORGETDIAB) Role: participant
- PRIN project, Ministry of University and Scientific Research and Technology, Italy
   *Artificial pancreas: physiological models, control algorithms and clinical trial* Pavia Unit: *Predictive control algorithms for the artificial pancreas* (2008 2010)
   Role: participant

#### **Local Projects**

PROJECT PAVIA-BOSTON
 Project promoted by the Pro-Rector in charge of the Third Mission, University of Pavia.
 Role: recipient of 15K€ for research stays at MIT

#### **Contracts**

- STELAR S.R.L. (2016-2017) 60K€
   Characterization, modelling and simulation software tool of the magnetic field control loop for Fast Field Cycling (FFC) NMR
   Role: principal investigator
- CESI-RICERCA, Centro Elettrotecnico Sperimentale Italiano (2006)
   Research contract number: ODAR06436
   Optimized procedures for the start-up of combined cycle plants
   Role: participant

## **RESULTS IN TECHNOLOGY TRANSFER**

#### **Patents**

 Magni L. D. M. Raimondo, G. De Nicolao, C. Dalla Man and C. Cobelli Predictive Control Based System And Method For Control Of Insulin Delivery In Diabetes Using Glucose Sensing, International Patent Application Serial No. PCT/US2008/082063, filed 31/10/2008

## **SOFTWARE**

# Promoter and co-author of LIONSIMBA



Li-ion Simulation Battery (LIONSIMBA) toolbox *A simulation environment for Li-ion batteries* 

Official website: <a href="http://sisdin.unipv.it/labsisdin/lionsimba.php">http://sisdin.unipv.it/labsisdin/lionsimba.php</a>

Available on GitHub: <a href="https://github.com/lionsimbatoolbox/LIONSIMBA">https://github.com/lionsimbatoolbox/LIONSIMBA</a>

More than 400 downloads!

## TEACHING AND STUDENT SUPERVISION

## **Lecturer**

Ph.D.	courses
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2018	Predictive Control, first online PhD in Engineering of Colombia, Universidad Autónoma de Occidente, Universidad Autónoma de Bucaramanga, Universidad Autónoma de Manizales (role: lecturer, ~48 hours, ~5 students). <b>Course taught in Spanish.</b>	online Colombia
2015	Model Predictive Control (Special Topics in Cyber-Physical Systems), Computer Engineering PhD School, TU Wien (role: lecturer, $\sim \! 30$ hours, $\sim \! 15$ students)	Vienna <i>Austria</i>
2014	Short course on Moving Horizon Estimation as part of the Hybrid Systems Course, TU Wien (role: lecturer, $\sim\!10$ hours, $\sim\!15$ students)	Vienna <i>Austria</i>
2014	Model Predictive Control (Special Topics in Cyber-Physical Systems), Computer Engineering PhD School, TU Wien (role: lecturer, $\sim \! 30$ hours, $\sim \! 15$ students)	Vienna <i>Austria</i>
<u>Master courses</u>		
2017-2018	Optimal Control of ODEs, University of Konstanz (role: lecturer, $\sim \! 30$ hours, $\sim \! 5$ students)	Konstanz <i>Germany</i>
2016-2017	Advanced Automation and Control, University of Pavia (role: lecturer, $\sim\!40$ hours/year, 5 credits, $\sim\!30$ students) Course taught in English	Pavia <i>Italy</i>
Bachelor courses		
2016-2017	Basics of Automatic Control, University of Pavia ( $\sim$ 100 hours/year, 9 credits, $\sim$ 100 students)	Pavia <i>Italy</i>

2015-2016	Basics of Automatic Control, University of Pavia ( $\sim$ 100 hours/year, 9 credits, $\sim$ 100 students)	Pavia <i>Italy</i>
2014-2015	Basics of Automatic Control, University of Pavia ( $\sim$ 100 hours/year, 9 credits, $\sim$ 100 students)	Pavia <i>Italy</i>
2013-2014	Basics of Automatic Control, University of Pavia ( $\sim$ 100 hours/year, 9 credits, $\sim$ 100 students)	Pavia <i>Italy</i>
2012-2013	Automatic Control and Process Control, University of Pavia ( $\sim$ 100 hours/year, 9 credits, $\sim$ 30 students)	Mantova <i>Italy</i>
2011-2012	Automatic Control and Process Control, University of Pavia ( $\sim$ 100 hours/year, 9 credits, $\sim$ 30 students)	Mantova <i>Italy</i>
2006-2007	Introduction to systems analysis, University of Pavia ( $\sim$ 20 hours/year, 1 credit, $\sim$ 100 students)	Pavia <i>Italy</i>

## **Teaching assistant**

2009-2011	Model Predictive Control, ETH (seminars, ~10 hours/year)	Zürich Switzerland
2007	Master in Methods for Management of Complex Systems, Intsitute for Advanced Study, IUSS, (seminars $\sim\!10hours)$	Pavia <i>Italy</i>
2001-2005	Tutor of computer programming (Java), University of Pavia (~50 hours/year)	Pavia <i>Italy</i>

## **Teaching rating**

In the teaching evaluation questionnaires, I obtained an average rating of 8.22/10 (departmental average 8.15/10) for the academic year 2014-2015 and an average rating of 8.97/10 (departmental average 8.14/10) for the academic year 2015-2016 and an average rating of 9.35/10 (departmental average 8.77/10) for the academic year 2016-2017.

## <u>Participation as president in exam committees</u>

- <u>Course</u>: *Basics of Automatic Control*, University of Pavia, Pavia, Italy. Number of evaluated tests: 252 Number of exam sessions: 15
- <u>Course:</u> *Automatic Control and Process Control*, University of Pavia, Mantova, Italy. Number of evaluated tests: 85 Number of exam sessions: 18

## **Student Supervision**

#### Ph.D. students

Nov. 17 - Andrea Pozzi Pavia
Role: supervisor Italy

**Topic: Advanced Battery Management Systems** 

2017 -Belo Horizonte Brenner Santana Rego Role: co-supervisor Brasil Topic: Fault-tolerant Control based on Settheoretic Methods for Unmanned Aerial Vehicles Nov. 16 -Alessio Mosca Pavia Role: supervisor Italy Topic: **Cooperative control** Nov. 16 -Giacomo Galuppini Pavia Role: co-advisor (supervisor: Prof. Lalo Magni) Italy Topic: Fast field cycling Marcello Torchio Nov. 13 – Jan. 17 Pavia Role: co-advisor (supervisor: Prof. Lalo Magni) Italy Topic: Modeling and Control of Lithium-ion Batteries Nov. 12 - Jan. 16 Giuseppe Roberto Marseglia Pavia Role: supervisor Italy **Topic: Active Fault Diagnosis and Fault Tolerant Control** 

#### Master thesis

#### Pavia, Italy

- 1. **Optimal power flow** applied to a microgrid in islanded mode, G. Milani
- 2. Control of **Lithium-ion batteries**, A. Pozzi
- 3. Study for a **Field Frequency Lock** for FFC NMR applications, G. Galuppini (co-advisor)
- 4. **Wind farm layout optimization** on a continuous 3D domain: a scalable approach, E. Messori
- 5. **Wind farm layout optimization** on a discretized 3D domain, F. Acerbi
- 6. Implementation in COMSOL Multiphysics of an electrochemical model of **lithium-ion battery**, C. Sarchi
- 7. Optimal placement **of wind turbines** on a continuous domain: an MILP-based approach, A. Arbasini
- 8. **Fast evaluation** of explicit nonlinear MPC, F. Fassina (Erasmus at Ruhr Universität Bochum)
- 9. Automatic remote control of 1:27 scale **race cars**, F. Fiorentino (Erasmus at Ruhr Universität Bochum)
- 10. Optimal placement of **wind turbines** of a wind farm, D. Colli
- 11. Design and implementation of **infrared vision system** and **breaking control** of a small-scale train, A. Barbieri
- 12. Nonlinear model predictive control of **glycaemia** in type 1 diabetic patients, S. Riverso
- 13. Validation of a linear model predictive control of **glycaemia** in type 1 diabetic patients, G. Ferrario
- 14. Experimentation in silico of predictive control algorithms for the control of **glycaemia** in type 1 diabetic patients, R. Tessera
- 15. Modeling and control of the start-up phase of a **combined cycle power plant**, A. Ferramosca
- 16. Predictive control of the start-up phase of a **combined cycle power plant**, D.Polli

#### Zürich, Switzerland

- 1. Implementation of a stochastic reachability framework for surveillance with pan-tilt-zoom cameras, S. Aufdenblatten
- 2. **Reachability** analysis of **nonlinear systems**: an approach based on conservative approximations, O. Huber
- 3. **Patrolling** algorithms for pan-tilt-zoom **cameras**, M. Pattarello
- 4. Control of Multiple Cameras for Tracking and **Surveillance**, D. Sturzenegger
- 5. A set theoretic method for verifying feasibility of a **fast** explicit **nonlinear** model predictive **controller**, S. Riverso

#### Bachelor thesis

#### Pavia, Italy

- 1. Implementation in **Java** of a **dial-a-ride** algorithm for single vehicle with multiple capacity, N. Gernone
- 2. Implementation in C ++ on a **Raspberry Pi** of a **predictive control** for tracking of trajectories, D. Quaini
- 3. The world of **brain computer interfaces**: introduction and design of a device for controlling a cart through cerebral waves, M. Pavan
- 4. **Test-bed** for the validation of **dial-to-ride strategies** in semiconductor production, G. Saccani
- 5. Design and control of a **two-joint inverted pendulum**, R. Carminati
- 6. **GPS anti-theft device** for vehicles: an application based on Arduino and MIT inventor, M. Messina
- 7. **Model Predictive Control** of a small-scale **crane**, G. Brigo
- 8. **Modeling** of a **quadricopter**, A. Ziruddu
- 9. Design and development of a **conveyor belt** and a **vision system** for **cargo handling process**, B. Codecà
- 10. Level control of a tank via conventional and renewable sources, F. Uberti
- 11. Realization and **Pure Pursuit control** of a mobile robot, F. Napoli
- 12. Advanced control of a mobile robot, L. Borrelli
- 13. Realization of an **infrared vision system** for control applications, I. Triggiani
- 14. Blade MCX2 **Helicopter**: **reverse engineer** of **the remote controller** for the automatic control of the aircraft, A. Rossetti
- 15. Identification and advanced control of a **solar tracker**, G.M. Riolo
- 16. Realization of a remote **control** system for a **small-scale submarine**, G. Simone
- 17. **Design** and **realization** of a small-scale **crane**, S. Termini
- 18. **Modeling** and **control** of a small-scale **crane**, L. Zurlo
- 19. Design and control of a **solar tracker**, G. Morandi
- 20. **Hand gesture control** of vehicles, E. Maranini
- 21. **Design and construction** of a **small-scale submarine**, C. Vazzana
- 22. Design and validation of a **control system** for a **small-scale submarine**, D. Gioria
- 23. **Design and implementation** of an automatic **system for handling goods**, L. Vantadori
- 24. **Modeling** and **control** of a **system for handling goods**, A. Spinoglio
- 25. Simulation and **implementation** of **control** strategies for an **RC helicopter**, F. Seccamonte
- 26. **Path following control** of a Lego Mindstorm mobile vehicle, D. Procop
- 27. **Speed control** of a small-scale train with MPC, M. Arcuri

- 28. Design and implementation of a 3D **infrared vision system**, M. Grecchi
- 29. Adaptive control of an RC helicopter based on the **modeling** of the **lithium battery**, G. Bellazzi
- 30. Design of a remote control system for **RC helicopter**, A. Ricci
- 31. **Embedded tracking control** of an inverted pendulum, M. Rotulo
- 32. Embedded predictive control of an inverted pendulum, A. Mezzadra

#### Zürich. Switzerland

- 1. MPC based **Trajectory Tracking** for 1:43 scale race cars, L. Wunderli
- 2. Software Framework for **Position Control** of 1:43 scale **race cars**, F. Ferrara
- 3. Infrared based **vision system** for tracking 1:43 scale **race cars**, M. Rutschmann

## Internship supervision

- 1. Usability study of a **mobile application**, M. Pichetto
- 2. Development of control logics of a **coal power plant**, E. Strotz
- 3. Standardization of HMI interfaces on **injection presses**, D. Prando
- 4. Development of a distributed control system for the supervision of a **metro station**, N.S.E. Fady
- 5. Implementation of **cryptographic** algorithms for the security of **telemetric data** archives, L. Merlano

#### OTHER INSTITUTIONAL ACTIVITIES

Jul. 15 –	Coordinator of promotional activities (Area Automatica) COR Centro Orientamento	Pavia <i>Italy</i>
2012-2016	Member of the committee for the qualification to the profession of Computer Science Engineer	Pavia <i>Italy</i>
Nov. 17 -	Member of the Scientific Board of the PhD program in Electronics, Computer science and Electrical Engineering	Pavia <i>Italy</i>
Aug. 17 –	Member of the board of the Department of Industrial Engineering and Information	Pavia <i>Italy</i>

#### Appointments as referee for the evaluation of research proposals

2017 Czech Science Foundation (1 proposal)

#### External Ph.D. thesis committee member

2014	PhD committee member for Feng Xu, Automatic Control Departament, Universitat Politècnica de Catalunya	Barcelona Spain
2013	PhD committee member for Isabel Jurado Flores, Department of Systems Engineering and Automation, University of Seville	Sevilla <i>Spain</i>

#### Reviewer of Ph.D. theses

2017 Hierarchical and Multilayer control structures based on MPC for large-scale systems, Xinglong Zang, Politecnico di Milano

2017 Algorithms and Applications for Nonlinear Model Predictive Control with Long Prediction Horizon, Yutao Chen, Università

degli studi di Padova

## INVITED SEMINARS, PARTICIPATION TO INTERNATIONAL CONFERENCES

## <u>Participation to international conferences</u>

Overall 20 presentations held at international conferences (CDC, ACC, ECC, NMPC, IFAC WC, IFAC NOLCOS, IFAC NecSys'09, Systol, Diabetes Technology Society Annual Meetings).

## Invited talks held at international conferences

Jul. 13	Approximate nonlinear explicit MPC based on reachability analysis, European Control Conference (ECC) 2013	Zürich Switzerland
Papers at invited ses	ssions of international conferences	
Sep. 10	Fast explicit nonlinear model predictive control via multi- resolution function approximation with guaranteed stability, Symposium on Nonlinear Control Systems (NOLCOS) 2010	Bologna <i>Italy</i>
Sep. 10	A Nonlinear Model Predictive Control Scheme with Multirate Integral Sliding Mode, Symposium on Nonlinear Control Systems (NOLCOS) 2010	Bologna <i>Italy</i>
Aug. 07	Regional Input-to-State Stability of Min-Max Model Predictive Control, Symposium on Nonlinear Control Systems (NOLCOS) 2007	Pretoria South Africa
Aug. 07	A Decentralized MPC Algorithm for Nonlinear Systems, Symposium on Nonlinear Control Systems (NOLCOS) 2007	Pretoria South Africa
<u>Invited seminars</u>		
Jun. 16	Optimal charging of Li-ion cells: a model predictive control approach	Magdeburg <i>Germany</i>
Jun. 16	Model Predictive Control algorithms for the charging of Li-ion cells	Braunschweig <i>Germany</i>
Feb. 16	Optimal Design of an Advanced Battery Management System Suitable for Hybrid Electric Vehicles, IIT, Italian Institute of Technology	Genova <i>Italy</i>
Dec. 15	Input Design for Active Fault Diagnosis, Imperial College London, Control and Power Seminar Series	London <i>UK</i>
Oct. 15	Input Design for Active Fault Diagnosis, Boston University, Center for Information & Systems Engineering	Boston <i>USA</i>
Aug .15	Input Design for Active Fault Diagnosis, Electrical Engineering and Computer Sciences Department, University of California, Berkeley	Berkeley <i>USA</i>
Apr. 15	Real-time Model Predictive Control for Optimal Charging of a Liion Battery, TU Wien, Ring Lecture Current Trends in Computer Science	Vienna <i>Austria</i>

#### Davide M. Raimondo – Curriculum Vitae

May 14	Active Fault Diagnosis for Uncertain Systems, TU Wien, Ring Lecture Current Trends in Computer Science	Vienna <i>Austria</i>
Jan. 14	Active Input Design for Fault Diagnosis: a Set-Based Approach, Automatic Control Laboratory, TU Wien	Vienna <i>Austria</i>
Jan. 14	Active Input Design for Fault Diagnosis: a Set-Based Approach, Automatic Control Laboratory, ABB Schweiz AG	Baden Switzerland
Jan. 14	Active Input Design for Fault Diagnosis: a Set-Based Approach, Automatic Control Laboratory, IfA, ETH	Zürich Switzerland
Sep. 13	Active Input Design for Fault Diagnosis: a Set-Based Approach, Automatic Control Laboratory, EPFL	Lausanne Switzerland
Sep. 13	Design of Active Inputs for Set-Based Fault Diagnosis. Mitsubishi Electric Research Laboratories	Cambridge <i>USA</i>
Apr. 13	Optimal placement of wind turbines, Institute of Cartography and Geoinformation (IKG), ETH	Zürich Switzerland
May 12	Time-optimal control for constrained nonlinear systems: A fast explicit approximation, Process systems engineering laboratory seminar, Department of Chemical Engineering, MIT	Cambridge <i>USA</i>
Jan. 12	An approximate explicit minimum time controller for nonlinear systems with feasibility and stability guarantees, ABB Schweiz AG	Baden Switzerland
Oct. 11	An approximate explicit minimum time controller for nonlinear systems with feasibility and stability guarantees, Ruhr-Universität Bochum	Bochum Germany
May 08	Robust Nonlinear Model Predictive Control, Automatic Control Laboratory, Department of Information Technology and Electrical Engineering, ETH	Zürich Switzerland

# EDITORIAL ACTIVITY AND PROFESSIONAL SERVICE

#### **Editorial Board**

2016- Associate Editor, Conference Editorial Board, IEEE Control Systems Society

May 2015 - Subject editor for the journal Optimal Control Applications and Methods

## **International Program Committees**

Nov. 2015 - Member of the stirring committee of the IEEE Technical committee on Process Control

Associate Editor of the American Control Conference 2018, (ACC '18)

2018	Conference Editorial Board member of the European Control Conference 2018 (ECC'18)	Limassol <i>Cyprus</i>	
2017	Associate Editor of the Control Decision Conference 2017 (CDC '17) and of the American Control Conference 2017 (ACC '17)		
2016	Associate Editor of the Control Decision Conference 2016 (CDC '16) and of the American Control Conference 2016, (ACC '16)		
2015	International program committee member of the Nonlinear Model Predictive Control 2015 (NMPC'15)	Sevilla <i>Spain</i>	
2015	Conference Editorial Board member of the European Control Conference 2015 (ECC'15)	Linz <i>Austria</i>	
2015	International program committee member of the International Symposium on Advanced Control of Chemical Processes (ADCHEM 2015)	Whistler <i>Canada</i>	
2014	Conference Editorial Board member of the European Control Conference 2014 (ECC'14)	Strasbourg <i>France</i>	
2013	International program committee member of the European Control Conference 2013 (ECC'13)	Zürich Switzerland	
2012	1 0	wijkerhout Ietherlands	
Organization of scientific events			

2010	Invited session "Nonlinear Model Predictive Control", 10 <sup>th</sup> IFAC Symposium on Nonlinear Control Systems	Bologna <i>Italy</i>
2008	Co-chair of the International workshop on Assessment and Future Direction of Nonlinear Model Predictive Control	Pavia <i>Italy</i>
2007	Invited session "New Development in NMPC", 7 <sup>th</sup> IFAC Symposium on Nonlinear Control Systems	Pretoria South Africa

## Reviewer activity

Reviewer of Applied Mathematics and Computation, Automatica, IEEE Transaction on Automatic Control, IEEE Transaction on Biomedical Engineering, International Journal of Control, International Journal of Adaptive Control and Signal Processing, International Journal of Robust and Nonlinear Control, International Journal of System Science, Journal of Process Control, Journal of Biomedical Informatics, SIAM Journal on Control and Optimization, System & Control Letters, Springer Lectures Notes in Control and Information Sciences Series (LNCIS), and several control conferences (CDC, ACC, ECC, IFAC WC, IFAC NOLCOS, IFAC NECSYS, IFAC NMPC, MTNS).