

Workshop on Control, Optimisation and Networks

A workshop to mark the contributions of Jan Maciejowski to the control field

Programme

Sunday 18 September 2016

18.00 - 20.00 Opening reception **Pembroke College**

Monday 19 September 2016

Lectures will be held in **Lecture Room 2, Department of Engineering, Trumpington St**

9:15 Registration and coffee Lecture Room 4
9:50 Welcome R. Sepulchre
Chair: F. Forni
10:00 **M. Gevers** *Identification of dynamical networks*
(Catholic University of Louvain)
10:25 **B. Hanzon** *On a class of global optimization methods for model reduction and system identification.*
(University College Cork)
10:50 **W. Heath** *Disturbance models for offset-free generalised internal model control*
(University of Manchester)

11:15 Coffee

Chair: B. Sengupta

11:45 **M. Deistler** *Linear dynamic models and mixed frequency data*
(TU Wien)
12:10 **J. Raisch** *Modelling and Control of Timed Discrete Event Systems with Standard Synchronisation Rules and Set-Based Constraints*
(TU Berlin)
12:35 **R. Shekhar** *Optimal Move Blocking Strategies for Computationally-Efficient Model Predictive Control*
(University of Melbourne)

13 Lunch (Lecture Room 4)

Chair: T. Hughes

14:15 **J. Lygeros** *Control of Populations*
(ETH Zurich)
14:40 **J. Goncalves** *Network inference: from theory to applications in biology*
(University of Luxembourg)
15:05 **G. Vinnicombe** *Decentralised Design and Distributed Control for Power Systems.*
(University of Cambridge)

15.30 Tea

Chair: T. Hughes

16:00 **C. Jones** *Predictive Demand Response for Commercial Buildings*
(EPFL)
16:25 **R. Findeisen** *Autonomous yet safe operation of complex interconnected systems*
(University of Magdeburg)
16:50 **M. Morari** *Jan Maciejowski's Impact on Control Research and Education*
(ETH Zurich)
17:15 Close Group photograph
19:00 Pre-dinner drinks **Pembroke College**
19:30 Banquet

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Tuesday 20 September 2016

9:30 Coffee

Chair: M. Seslija

10:00 **K. Astrom**

(Lund University)

Control Design for a MEMS Accelerometer with Tunneling Sensing

10:25 **R. Ober**

(University of Texas at Dallas)

Single Molecule Microscopy: use of balanced realizations for location estimation

10:50 **S. Longo**

(Cranfield University)

Real-time NMPC strategies for vehicle stability at the limits of handling

11:15 Coffee

Chair: M. Seslija

11:45 **P. Roberts**

(Cambridge Medical Robotics)

Why should we trust a robot in the operating theatre?

12:10 **M. Gallieri**

(McLaren Applied Technologies)

LASSO MPC: A summary of my PhD research

12:35 **A. Richards**

(University of Bristol)

Predictive Control for Robot Motion

13 Lunch (Lecture Room 4)

Chair: T. O'Leary

14:15 **P. Goulart**

(University of Oxford)

Tight Global Linear Convergence Rate Bounds for Operator Splitting Methods

14:40 **L. Ljung**

(Linkoping University)

Regularization and orthonormal basis functions in linear regression output error methods for linear system identification

15:05 **D. Limon**

(University of Seville)

Model Predictive Control for tracking periodic signals

15.30 Tea

Chair: F. Forni

16:00 **I. Lestas**

(University of Cambridge)

Stability and instability in gradient dynamics

16:25 **K.V. Ling**

(Nanyang Technological University)

Event-triggered Sequence-based Anytime Control as an Event-triggered Markov Jump System

16:50 **E. Kerrigan**

(Imperial College, London)

Optimal Control of Multiprocessor Systems

17:15 Close

R. Sepulchre