

# 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**

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

11:15 Coffee

Chair: B. Sengupta

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

13 Lunch (Lecture Room 4)

Chair: T. Hughes

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

15.30 Tea

Chair: T. Hughes

<b>16:00</b>	<b>C. Jones</b> (EPFL)	<i>Predictive Demand Response for Commercial Buildings</i>
<b>16:25</b>	<b>R. Findeisen</b> (University of Magdeburg)	<i>Autonomous yet safe operation of complex interconnected systems</i>
<b>16:50</b>	<b>M. Morari</b> (ETH Zurich)	<i>Jan Maciejowski's Impact on Control Research and Education</i>
<b>17:15</b>	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	<b>K. Astrom</b> (Lund University)	<i>Control Design for a MEMS Accelerometer with Tunneling Sensing</i>
10:25	<b>R. Ober</b> (University of Texas at Dallas)	<i>Single Molecule Microscopy: use of balanced realizations for location estimation</i>
10:50	<b>S. Longo</b> (Cranfield University)	<i>Real-time NMPC strategies for vehicle stability at the limits of handling</i>
		11:15 Coffee Chair: M. Seslija
11:45	<b>P. Roberts</b> (Cambridge Medical Robotics)	<i>Why should we trust a robot in the operating theatre?</i>
12:10	<b>M. Gallieri</b> (McLaren Applied Technologies)	<i>LASSO MPC: A summary of my PhD research</i>
12:35	<b>A. Richards</b> (University of Bristol)	<i>Predictive Control for Robot Motion</i>
		13 Lunch (Lecture Room 4) Chair: T. O'Leary
14:15	<b>P. Goulart</b> (University of Oxford)	<i>Tight Global Linear Convergence Rate Bounds for Operator Splitting Methods</i>
14:40	<b>L. Ljung</b> (Linkoping University)	<i>Regularization and orthonormal basis functions in linear regression output error methods for linear system identification</i>
15:05	<b>D. Limon</b> (University of Seville)	<i>Model Predictive Control for tracking periodic signals</i>
		15.30 Tea Chair: F. Forni
16:00	<b>I. Lestas</b> (University of Cambridge)	<i>Stability and instability in gradient dynamics</i>
16:25	<b>K.V. Ling</b> (Nanyang Technological University)	<i>Event-triggered Sequence-based Anytime Control as an Event-triggered Markov Jump System</i>
16:50	<b>E. Kerrigan</b> (Imperial College, London)	<i>Optimal Control of Multiprocessor Systems</i>
17:15	Close	R. Sepulchre