

# Workshop on Networks and Control

Wednesday 5 July 2017

A workshop to mark the contributions of Malcolm Smith to the Control field in celebration of his 60th birthday

## PROGRAMME

Lectures will be held in the Bateman Auditorium, Gonville and Caius College, Trinity Street, Cambridge, UK

9:15 **Registration and coffee** (The Bateman Room)

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| <b>9:50</b>  | <b>Keith Glover</b><br>(University of Cambridge)        | Welcome  |
|              |   | CHAIR: Gavin Walker (The MathWorks)  |
| <b>10:00</b> | <b>M. Vidyasagar</b><br>(University of Texas at Dallas) | <i>A new look at an old problem: Partial realization via compressed sensing</i>                |
| <b>10:25</b> | <b>Shinji Hara</b><br>(Chuo University, Japan)          | <i>Hierarchically Cooperative Control Towards "Wa" (Harmony)</i>                               |
| <b>10:50</b> | <b>Timothy Hughes</b><br>(University of Cambridge)      | <i>A generating set for the class of series-parallel minimally reactive bicubic impedances</i> |

11:15 **Coffee** (The Bateman Room)

CHAIR: Fu-Cheng Wang (National Taiwan University)

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|--------------|--|---|
| <b>11:45</b> | <b>Yutaka Yamamoto</b><br>(Kyoto University)               | <i>Tracking beyond the Nyquist frequency in sampled-data systems</i>                                |
| <b>12:10</b> | <b>Jason Jiang</b><br>(University of Bristol)              | <i>Positive-real functions: regularity, essential regularity, and a structure-immittance format</i> |
| <b>12:35</b> | <b>Patrick Dewilde</b><br>(Technische Universität München) | <i>Emergent behavior (an attempt at synthesis between chaos theory and philosophy)</i>              |

**13:00** Group photograph

13:10 **Lunch** (Gonville Court)

CHAIR: Jorge Goncalves (University of Luxembourg)

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|--------------|---|--|
| <b>14:00</b> | <b>Anders Rantzer</b><br>(Lund University)                            | <i>Adaptive control - What can we learn?</i>               |
| <b>14:25</b> | <b>Michael Chen</b><br>(Nanjing University of Science and Technology) | <i>Recent advances in the inerter and its applications</i> |
| <b>14:50</b> | <b>Dick Glover</b><br>(McLaren Applied Technologies)                  | <i>Three Control Topics at McLaren</i>                     |

15.15 **Tea** (The Bateman Room)

CHAIR: Rodolphe Sepulchre (University of Cambridge)

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|--------------|---|---|
| <b>15:45</b> | <b>Glenn Vinnicombe</b><br>(University of Cambridge)          | <i>Engineering robust oscillations in the cell</i>  |
| <b>16:10</b> | <b>Tryphon Georgiou</b><br>(University of California, Irvine) | <i>Malcolm C. Smith, a third of a century in Systems, Control &amp; Circuits: personal reminiscences and more</i> |
| <b>16:45</b> | CLOSE   |   |

## Interval

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|--------------|---|
| <b>18:00</b> | Concert by Gonville and Caius Chapel Choir (Chapel) |
| <b>18:40</b> | Preprandial drinks (Gonville Court)                 |
| <b>19:30</b> | Conference Banquet (Hall)                           |
| <b>21:30</b> | Postprandial drinks (Senior Combination Room)       |