

2nd Workshop on Fundamentals of Collective Adaptive Systems (FoCAS 2014)

| Session 1: Fundamentals of Collective Adaptive Systems | |
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| 09:30-09.50 | <i>Building blocks for aggregate programming of self-organising applications</i> by Jacob Beal and Mirko Viroli |
| 09:50-10:10 | <i>A Goal Model for Collective Adaptive Systems</i> by Antonio Bucchiarone, Claudio Antares Mezzina and Heorhi Raik |
| 10:10-10:30 | <i>Enabling Self-expression: the Use of Roles to Dynamically Change Adaptation Patterns</i> by Mariachiara Puviani, Giacomo Cabri and Letizia Leonard |
| 10.30-10.50 | <i>A Perspective on Defining the Collective Adaptive Systems Problem</i> by Niranjani Suri and Andrew Scott |

1100-1130 **Coffee Break**

| Session 2: Applications of Collective Adaptive Systems | |
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| 11.30-11.50 | <i>Data verification for collective adaptive systems: spatial model-checking of vehicle location data</i> by Vincenzo Ciancia, Stephen Gilmore, Diego Latella, Michele Loreti and Mieke Massink |
| 11.50-12.10 | <i>On Intention Propagation Based Prediction in Autonomously Self-adapting Navigation</i> by Laszlo Z. Varga |
| 12.10-12.30 | <i>Towards a Real World Simulator for Collaborative Distributed Learning in The Scenario of Urban Mobility</i> by Andreas Poxrucker, Gernot Bahle and Paul Lukowicz |
| 12.30-12.50 | <i>Modelling residential smart energy schemes</i> by Vashti Galpin |

1300-1400 **Lunch**

| Session 3 : Invited Speaker and Panel Discussion | |
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| 14:00-15:00 | <i>Engineering Collective Behaviours in Future Smart Cities</i> by Franco Zambonelli |
| 15:00-15.30 | FOCAS Roadmapping : Activity & Discussion |

1530-1600 **Coffee Break**

| Session 4 | |
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| Nature-Inspired Techniques for Collective Adaptive Systems | |
| 16.00-16.20 | <i>Social Adaptation of Robots for Modulating Self- Organization in Animal Societies</i> by Payam Zahadat, Michael Bodi, Ziad Salem, Frank Bonnet, Marcelo Elias de Oliveira, Francesco Mondada, Karlo Griparic, Tomislav Haus, Stjepan Bogdan, Rob Mills, Pedro Mariano, Luis Correia, Olga Kernbach, Serge Kern- bach and Thomas Schmickl |
| 16.20-16.40 | <i>On the 'Local-to-Global' Issue in Self-Organisation: Chemical Reactions with Custom Kinetic Rates</i> by Stefano Mariani *best student paper |
| 16.40-17.00 | <i>Scalability Issues of Firefly-based Self- Synchronization in Collective Adaptive Systems</i> by Iva Bojic, Tomislav Lipic and Mario Kusek |

1800-1930 FoCAS Science Café : SASO See - SASO Do