

| = Modelling: Challenges and Perspectives = |

Stirling, 11th June 2012

The SICSA ModAbs 2012 Workshop

<http://www.cs.stir.ac.uk/events/mcp2012/>

WORKSHOP REPORT

The ModAbs SICSA research theme has organised a scientific workshop which took place at the University of Stirling on 11th June 2012. The workshop intended to be an occasion for the ModAbs theme to gather together and discuss/present ongoing work and research directions and also to interact with a wider audience.

The workshop featured three technical invited speakers, a few contributed short talks, a talk given by an EPSRC representative, a Modelling Exercise and a final discussion.

The day was opened by the talk of Prof. Alberto Policriti, from University of Udine, Italy, who is visiting the University of Edinburgh as SICSA Distinguished Visitor. He gave the talk "Simulation by Hybrid Automata", presenting recent developments of his research about the interplay between discrete and continuous interpretations of models based on Hybrid Automata.

The second invited talk "Statistical Model Checking of Stochastic Hybrid Systems in UPPAAL-SMC" was given by Prof. Kim Larsen, from Aalborg University, Denmark, who presented the results of a long lasting research project on Timed Automata-based verification.

The last talk "Systems and Security Modelling: From Theory to Practice (Really)" given by Prof. David Pym, from University of Aberdeen, Scotland, was about a modelling framework for reasoning on resources, processes and locations.

These three talks covered topics of interests for the ModAbs community and were delivered via very insightful and stimulating presentations.

Dr Christina Turner, from EPSRC, illustrated the current and future funding opportunities in the talk "Modelling and the wider EPSRC context" given via teleconference. She then kindly answered some questions posed by the audience.

Three contributed talks presented ongoing work within the ModAbs theme (Dr. David Cairns) and open modelling problems from other areas, with a potential to stimulate new collaborations (Dr. Marwan Fayed, Dr Bruce Graham). Dr. Graham also provided information about BBSRC activities, complementing Turner's talk.

A Modelling Exercise was organised by researchers from Stirling (Dr. Andrea Bracciali), Edinburgh (Dr. Allan Clark), and Glasgow (Dr. Alice Miller and Dr. Gethin Norman). Three systems to be modelled were outlined. Teams were supposed to develop models and analysis under time constraints and report on the obtained results. Nice results about the modelling efforts of two teams from Edinburgh were presented by Allan Clark and Chris Banks. The initiative stimulated some discussion, with some positive comments, the main drawback being the limited participation.

More than 20 participants and the 4 invited speakers attended the workshop from the University of Edinburgh, Heriot-Watt University, University of Glasgow, University of Aberdeen, University of Stirling, University of Trieste, University of Udine, Aalborg University and EPSRC. They included 3 PostDocs, 4 PhD students and 2 students. Other research areas were represented beyond the ModAbs theme, including mathematics, neurosciences, machine learning and networks. Opportunities for informal discussion and networking arose during the two coffee-breaks, the lunch interval and a short final discussion.

The workshop was supported by SICSA and Computing Sciences and Mathematics of Stirling University, and enjoyed the kind availability of the speakers, the contribution of the participants and the administrative staff of SICSA and the University of Stirling, and the coordination of the ModAbs theme leader, Prof. Jane Hillston.

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