

## **SICSA-sponsored Parametricity Workshop — Final Report**

**Dr. Patricia Johann, University of Strathclyde**

The 2013 Parametricity Workshop took place on Wednesday, 22 May 2013 at the University of Strathclyde. The meeting was a follow-up to the very successful Parametricity Workshop held at the same venue in May 2012. Both events were organized by Dr. Patricia Johann, Department of Computer and Information Science, University of Strathclyde. The aim of this year's workshop was the same as that of last year's, namely to bring together top parametricity researchers to discuss the latest developments in this exciting research area.

The workshop brought together 14 of the top researchers in parametricity for a day of talks and discussion about the state of the art on this topic. In addition, a number of SICSA researchers working in closely related areas, as well as seven PhD students from the University of Edinburgh, the University of Strathclyde, and Chalmers University in Gothenburg, Sweden, participated. Altogether, this 27 researchers participated in this year's workshop. Participants came mainly from Scotland, England, and Wales, but there was also one participant from Germany and one from Sweden.

The workshop hosted three invited speakers: Professor Neil Ghani of the University of Strathclyde, Professor Alex Simpson of the University of Edinburgh, and Guilhem Moulin of Chalmers University. Moulin is a PhD student under the direction of Professor Peter Dybjer. He has already published several papers on parametricity, and says it was an honor to be invited to speak in such distinguished company at the workshop.

We kicked off the day with a brief welcome by me. Then, as befits a workshop on parametricity, Dr. Derek Dreyer of the Max Plank Institute für Informatik in Saarbrücken, Germany said a few words in remembrance of Professor John Reynolds. Professor Reynolds was a pioneer of parametricity research, and formulated the property of semantic parametricity that has been so central to research in this area. He passed away just a few weeks ago. Next, Professor Ghani spoke about his work on fibrational parametricity with me and two PhD students (both participating in the workshop) at the University of Strathclyde. Guilhem Moulin then spoke about improving implementations of dependent type theory using a notion of erasure based on coloring. Finally, Professor Simpson spoke about some of the issues that arise in adapting relational parametricity to reason about polymorphism in the presence of computational effects. Throughout the day there was ample opportunity for informal discussion about parametricity. That is something the participants at last year's workshop, many of whom attended again this year, explicitly asked for more of this time.

The web page for this year's workshop is at

<http://www.msp.cis.strath.ac.uk/parametricity-2013/>.

The main outcome of the event was the dissemination of knowledge about parametricity. This was achieved through both the formal programs and the informal discussions that could be heard throughout the room during breaks. A secondary outcome was to raise the profile of parametricity research at the University of Strathclyde in the wider community.

SICSA funding was used to cover catering costs, travel and subsistence for invited speakers, and travel and subsistence for the event organizer. A claim for reimbursement will be sent under separate cover.