



Models of Concurrency and Open Computing

A one day seminar to commemorate the retirement of Mike Shields

Friday 24 November 2006

Mike Shields devoted his research career to developing some innovative and elegant foundational work on models of concurrency. In this seminar to commemorate Mike's retirement, we will argue that the need for his work has never been greater. Much of the foundational work on "Classical Computation" either explicitly or implicitly works within three assumptions [Costa and Dimuro, 2005*]:

- A computing machine operates as a closed system, operating as a function to transform inputs to outputs;
- A computing machine may only use finite resources, thus dismissing infinite computations;
- The structure of the computing machine remains fixed during computation.

None of these assumptions are valid in the areas of ubiquitous computing and service oriented computing. As yet, the extended (and more realistic) domain of "Interactive Computation" does not have an agreed theoretical foundation. The talks at this seminar will all help us explore the hypothesis that "Mike's views on true concurrency are critical to the success of developing a theory of Interactive Computation".



Invited Speakers

- Antoni Mazurkiewicz, IPIPAN
- Sotiris Moschogiannis, UniS
- Marta Kwiatkowska, University of Birmingham
- Juliana Bowles, University of Birmingham
- Mike Shields, Malta
- Paul Krause, UniS

Location

BCS Offices, First Floor, The Davidson Building, 5 Southampton Street, London WC2E 7HA

Registration

The registration fee for FACS members is £15 and for non members £20. Please register at <http://www.bcs-facs.org/events/mococ.html> Deadline: 18 November

Programme

- 10:00 Opening – **Paul Krause**
- 10:15 *Three faces of Shields' theory of concurrency* – **Antoni Mazurkiewicz**
- 11:10 Coffee Break
- 11:30 *Recent developments in Shields' theory of concurrency* – **Sotiris Moschogiannis**
- 12:20 Lunch
- 13:30 *Compositional state space reduction using untangled actions* – **Marta Kwiatkowska**
- 14:20 *Concurrency, Communication and Components* – **Juliana Bowles**
- 15:10 Tea Break
- 15:30 *Intellectual reminiscences* – **Mike Shields**
- 16:20 Final remarks – **Paul Krause**, UniS
- 16:30 Close