Editorial

This is a special issue of papers revised from the *5th IEEE International Conference on Software Engineering and Formal Methods* (SEFM), held in London, England, in September 2007. The proceedings were originally published by IEEE Computer Society Press, edited by Mike Hinchey and Tiziana Margaria.

After the conference, selected presenters of papers with the best reviews were invited to submit significantly extended papers for inclusion in this special issue. These were re-reviewed by a new set of reviewers and a final selection of five accepted papers was made for this collection. Thank you to the reviewers for their very detailed comments on the papers.

A Hoare Logic for Linear Systems by Rob Arthan, Ursula Martin, and Paulo Oliva presents reasoning using graphical block diagrams, based on an underlying homological algebraic framework.

Model Checking RAISE Applicative Specifications by Juan I. Perna and Chris George considers the correctness of software components, including semantic foundations.

Proving Termination of Non-linear Command Sequences by Domagoj Babic, Byron Cook, Alan J. Hu, and Zvonimir Rakamaric is based on divergence testing for each variable that has an influence on a loop's termination condition.

A Dynamic Logic for Deductive Verification of Multi-threaded Programs by Bernhard Beckert and Vladimir Klebanov considers functional verification of parallel Java programs, based on symbolic execution.

Atomicity Failure and the Retrenchment Atomicity Pattern by Richard Banach, Czesław Jeske, Anthony Hall, and Susan Stepney presents an example air traffic control system and the Mondex electronic purse case study, considering atomic and fine-grained levels, in the context of ACID (atomic, consistent, isolated, durable) transactions.

Thank you to *Formal Aspects of Computing* for enabling the publication of this set of papers. A special thank you to John Cooke for his constant helpfulness and endless patience in the production of this issue.

The *International Conference on Software Engineering and Formal Methods* continues to be held annually, with SEFM 2013, the 11th conference, being held in Madrid, Spain in September 2013. For general information on the SEFM series of conferences, see: <http://en.wikipedia.org/wiki/SEFM>

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