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Preface

Formal engineering methods are changing the way that software systems are developed. With language and tool support, they are being used for automatic code generation, and for the automatic abstraction and checking of implementations. In the future, they will be used at every stage of development: requirements, specification, design, implementation, testing, and documentation.

The ICFEM series of conferences aims to bring together those interested in the application of formal engineering methods to computer systems. Researchers and practitioners, from industry, academia, and government, are encouraged to attend, and to help advance the state of the art. Authors are strongly encouraged to make their ideas as accessible as possible, and there is a clear emphasis upon work that promises to bring practical, tangible benefit: reports of case studies should have a conceptual message, theory papers should have a clear link to application, and papers describing tools should have an account of results.

ICFEM 2004 was the sixth conference in the series, and the first to be held in North America. Previous conferences were held in Singapore, China, UK, Australia, and Japan. The Programme Committee received 110 papers and selected 30 for presentation. The final versions of those papers are included here, together with 2-page abstracts for the 5 accepted tutorials, and shorter abstracts for the 4 invited talks.

We would like to thank: Dines Bjørner, for his work in organizing speakers and sponsors; Jin Song Dong and Jim Woodcock, for an excellent handover from ICFEM 2003; Joxan Jaffar, J Strother Moore, Peter Neumann, and Amitabh Srivastava, for agreeing to address the conference; the authors, for submitting their work; the Programme Committee, and their colleagues, for their reviews; and Springer, for their help with publication.

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November 2004

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