



## Preface

This volume contains the proceedings of the Bytecode 2005 workshop, the *First Workshop on Bytecode Semantics, Verification, Analysis and Transformation*, held in Edinburgh on the 9th of April 2005 as part of ETAPS 2005.

Bytecode, such as produced by *e.g.* Java and .NET compilers, has become a topic of interest, both for industry and academia. The industrial interest mainly stems from the fact that bytecode is typically used in critical environments, such as the Internet and smart cards. Moreover, an important characteristic for bytecode is that it is device-independent and allows dynamic loading of classes. For researchers that wish to apply formal methods to bytecode, this dynamic nature of bytecode provides an extra challenge. In addition, also the unstructuredness of the code and the pervasive presence of the stack provide extra challenges for the analysis of bytecode.

The workshop focuses on the latest developments in the semantics, verification, analysis and transformation of bytecode; encompassing both new theoretical results and tool demonstrations.

As the workshop chair, I would like to thank the program committee, Frédéric Besson, Etienne Gagnon, Marieke Huisman and Don Syme whose invaluable help and enthusiasm ensured the success of the event; and the ETAPS organisation, namely Massimo Felici who coordinated the workshops. I would also like to thank all anonymous referees, for their hard work, particularly as much of this had to be done over their Christmas holidays.

I am also indebted to our invited speaker, Xavier Leroy, whose presence at the workshop as well as the talk itself has considerably enhanced the scientific interest of this workshop.

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*Verona, April 2005*