This special issue of the journal Logical Methods in Computer Science (LMCS) contains revised and extended versions of four papers presented at the 19th International Conference on Tools and Algorithms for the Construction and Analysis of Systems (TACAS'13), held in Rome, Italy, during the period March 18-21, 2013, as part of the Joint European Conferences on Theory and Practice of Software (ETAPS).

TACAS is a forum for researchers, developers, and users interested in rigorously based tools and algorithms for the construction and analysis of systems. The research areas covered by TACAS include, but are not limited to, formal methods, software and hardware specification and verification, static analysis, dynamic analysis, model checking, theorem proving, decision procedures, real-time, hybrid and stochastic systems, communication protocols, programming languages, and software engineering. TACAS provides a venue where common problems, heuristics, algorithms, data structures, and methodologies in these areas can be discussed and explored.

We have invited a total of eight papers to two special issues of the journals LMCS and STTT. The papers were chosen amongst the best papers presented at the conference. We then partitioned these papers according to their relevance to the respective journals. We are grateful to the authors for their contributions, and to the TACAS'13 PC members/reviewers and the referees of this special issue for their thorough and valuable work.

Nir Piterman and Scott Smolka
TACAS 2013 Guest Editors

All articles have already been published in the regular issues of Logical Methods in Computer Science.