This volume contains the proceedings of TGC 2014, the Ninth International Symposium on Trustworthy Global Computing. The symposium was held in Rome, Italy, during September 5–6, 2014. It was colocated with the CONCUR and IFIP-TCS. Informal pre-proceedings were made available in electronic form to the participants. The papers in this volume were further improved by the authors, in response to helpful feedback received at the symposium.

The Symposium on Trustworthy Global Computing is an international annual venue dedicated to safe and reliable computation in the so-called global computers, i.e., those computational abstractions emerging in large-scale infrastructures such as service-oriented architectures, autonomic systems, and cloud computing systems. It focuses on frameworks, tools, algorithms, and protocols for open-ended, large-scale systems and applications, and on rigorous reasoning about their behavior and properties. The underlying models of computation incorporate code and data mobility over distributed networks that connect heterogeneous devices, often with dynamically changing topologies. In this context, TGC 2014 focused on secure and reliable computation.

The first TGC event took place in Edinburgh in 2005, with the co-sponsorship of IFIP TC-2, as part of ETAPS 2005. TGC 2005 was the evolution of the previous Global Computing I workshops held in Rovereto in 2003 and 2004 (see LNCS vol. 2874) as well as of the workshops on Foundation of Global Computing held as satellite events of ICALP and CONCUR (see ENTCS vol. 85). Four editions of TGC were co-located with the reviews of the EU-funded projects AEOLUS, MOBIUS, and SENSORIA within the FP6 initiative. They were held in Lucca, Italy (TGC 2006, LNCS vol. 4661); in Sophia Antipolis, France (TGC 2007, LNCS vol. 4912); in Barcelona, Spain (TGC 2008, LNCS vol. 5474); and in Munich, Germany (TGC 2010, LNCS vol. 6084). Further editions of TGC were held in Aachen, Germany (TGC 2011, LNCS vol. 7173) and in Newcastle upon Tyne, UK (TGC 2012, LNCS vol. 8191). In 2013, TGC was held in Buenos Aires (LNCS vol. 8358).

TGC 2014 solicited contributions in all areas of global computing, including (but not limited to) theories, languages, models, and algorithms; language concepts and abstraction mechanisms; security, trust, privacy, and reliability; resource usage and information flow policies; software development and software principles; model checkers, theorem provers, and static analyzers.

The fruitful collaboration with CONCUR, initiated in 2013, was continued this year allowing concurrent submissions to CONCUR and TGC, with the reviewing schedule of TGC slightly delayed with respect to that of CONCUR and submissions accepted by CONCUR were automatically withdrawn from TGC. This year there were 5 papers concurrently submitted to TGC and CONCUR and 15 papers were submitted only to TGC (a paper initially submitted was later withdrawn). This time, the papers submitted at CONCUR and TGC were also reviewed by the Program Committee of TGC, praise-worthy for the effort put in the thorough revision process and the accurate discussion.
The Program Committee selected 12 papers to be included in this volume and to be presented at the symposium (2 of which were conditionally accepted in the first instance). The program was structured in sessions named “Theory” (chaired by Michele Loreti), “Session Types” (chaired by Massimo Bartoletti and Stephanie Delaune), “Security” (chaired by Peter Thiemann), “Cryptographic Protocol Analysis” (chaired by Matteo Maffei). Also, a session on “Brief Announcements” (chaired by Emilio Tuosto) gave the possibility to participants to present (on-going) work not included in this proceedings. Finally, TGC’s program had invited lectures of Véronique Cortier (CNRS, France) and, jointly with CONCUR, of Catuscia Palamidessi (Inria Saclay and LIX, France).

We would like to thank the Steering Committee of TGC for inviting us to chair the conference; the members of the Program Committee and external referees for their detailed reports and the stimulating discussions during the review phase; the authors of submitted papers, the invited speakers, the session chairs, and the attendees for contributing to the success of the event. We are also grateful to Paolo Baldan and Daniele Gorla, the chairs of CONCUR 2014, with whom we had the opportunity to collaborate. Finally, we thank the providers of the EasyChair system, which was used to manage the submissions.

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