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Validation of Stochastic Systems

A Guide to Current Research

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Preface

It is with great pleasure that we present to you this tutorial volume entitled *Validation of Stochastic Systems*. It is one of the results of the Dutch-German bilateral cooperation project “Validation of Stochastic Systems” (VOSS), financed by NWO and DFG (the Dutch and German science foundations, respectively).

In the early days of 2002, the idea emerged to organize a seminar at Schloss Dagstuhl, not the usual Dagstuhl seminar with primarily invited participants, but a seminar aimed at young(er) people, and for which the organizers assign themes to be worked upon and presented on. Following an open call announced via the Internet in the spring of 2002, we received many applications for participation. After a selection procedure, we decided to assign (mostly) teams of two researchers to work on specific topics, roughly divided into the following four theme areas: “Modelling of Stochastic Systems,” “Model Checking of Stochastic Systems,” “Representing Large State Spaces,” and “Deductive Verification of Stochastic Systems.” These are the titles of the four parts of this volume.

The seminar was held in Schloss Dagstuhl during December 8–11, 2002 as part of the so-called GI/Research Seminar series. This series of seminars is financially supported by the *Gesellschaft für Informatik*, the German Computer Society. At that point in time the papers had already undergone a first review round. Each of the tutorial papers was presented in a one-hour session, and on the basis of the presentations we decided to bring together a selection of them into a book. A second review round was performed throughout 2003; at the end of 2003 all contributions were finished. We are glad that Springer-Verlag was willing to publish it in their well-established *Lecture Notes in Computer Science* series, in particular in the “green cover” Tutorial subseries.

To conclude this preface, we would like to thank NWO and DFG for making the VOSS bilateral cooperation project possible in the first place. Secondly, we would like to thank the *Gesellschaft für Informatik* for supporting the participants of the seminar. We would like to thank the whole team at Schloss Dagstuhl for their willingness to host us and for their hospitality. We also thank the authors of the tutorial papers as well as the reviewers for their efforts; without you, there would not have been a workshop! Finally, we would like to thank José Martínez (of the University of Twente) for his work on the editing of this volume.

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