Alea jacta est
Verification of probabilistic, real–time and parametric systems

een wetenschappelijke proeve op het gebied
van de Natuurwetenschappen, Wiskunde en Informatica

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Preface

Alea jacta est. With the printing of this thesis, almost five years of research end. This was a period of hard work, of astonishing elegance and beauty present in concurrency theory, with a great deal of fun and, sometimes, also doubts as to whether my results were interesting enough for publication. Many people have contributed to my life or to my thesis in various ways. Below, I mention some of them.

Although it is for some reason *not done* in the Dutch graduation tradition, I would first of all like to thank my promotor Frits Vaandrager. He directed my research, provided an enormous amount of valuable ideas, taught me how to write papers and, no matter how busy he was, he carefully read all my writings. Once, he returned his comments on a draft version with many stains of desert sand, as he had been reading it during his vacation in Egypt. His influence can be found on each page of this thesis.

Frits's deep passion for research, his profound knowledge and broad overview of the field, his attitude towards theoretical and more practically oriented research and his capability of never meeting a deadline have made a deep impression on me. I hope, and believe, that I have learned something in each of these points.

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My research also profited a lot from the Promise meetings. Promise, standing for *pro*babilistic *m*ethods *i*n *s*oftware *e*ngineering, is a group of people in the Netherlands working on probabilistic systems and provided an excellent forum for informal presentations and discussions. It enabled me to quickly learn from related work, exchange informal sketches of ideas and to present early work. Our meetings often ended in a pub, where we drank a couple of beers and used napkins or beer mats to sketch our latest ideas on probabilistic bisimulation relations. Hence, many thanks go to Suzana Andova, Erik de Vink, Pedro D'Argenio, Holger Hermanns, Joost–Pieter Katoen, Jerry den Hartog, Jeroen Voeten, Perry de Groot, Kees Middelburg, Jos Baeten and Ed Brinksma, for many fruitful and enjoyable meetings.

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easier and helped me with the final struggle of completing this thesis.

I owe very much to my former Master's thesis supervisor Erik Barendsen. I have been teaching with him for many years, first as a student–assistant, later as a colleague. If ever I gave a good course or talk, then this is because Erik taught me the basics of it.

I would like to thank Scott Smolka and the people in his group for their hospitality during my visit in the beginning of 2000. The experience of doing research in the USA has been extremely valuable for me. It strengthened my decision to go abroad for my post–doc.

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I reserve the greatest thanks for Peter. For the things that really matter.

Santa Cruz, March 2002
Mariëlle Stoelinga

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