This volume contains the proceedings of the 12th International Conference on
Concurrency Theory (CONCUR 2001) hosted by Basic Research in Computer
Science (BRICS) and the Department of Computer Science at Aalborg Univer-
sity, Denmark, August 20–25, 2001.

The purpose of the CONCUR conferences is to bring together researchers,
developers, and students in order to advance the theory of concurrency, and
promote its applications. Interest in this topic is continuously growing, as a
consequence of the importance and ubiquity of concurrent systems and their
applications, and of the scientific relevance of their foundations. The scope co-
covers all areas of semantics, logics, and verification techniques for concurrent
systems. Topics include concurrency related aspects of: models of computation
and semantic domains, process algebras, Petri nets, event structures, real-time
systems, hybrid systems, decidability, model-checking, verification techniques,
refinement techniques, term and graph rewriting, distributed programming, lo-
cic constraint programming, object-oriented programming, typing systems and
algorithms, case studies, and tools and environments for programming and ve-
ification.

The first two CONCUR conferences were held in Amsterdam (NL) in 1990
and 1991. The following ones in Stony Brook (USA), Hildesheim (D), Uppsala
(S), Philadelphia (USA), Pisa (I), Warsaw (PL), Nice (F), Eindhoven (NL),
and State College (USA). The proceedings have appeared in Springer LNCS, as
volumes 458, 527, 630, 715, 836, 962, 1119, 1243, 1466, 1664, and 1877.

Of the 78 regular papers submitted this year, 32 were accepted for presenta-
tion and are included in the present volume. The conference also included talks
by four invited speakers: Bengt Jonsson (Uppsala University, S), Robin Mil-
ner (University of Cambridge, GB), Shankar Sastry (University of California,
Berkeley, USA), and Steve Schneider (Royal Holloway, University of London,
GB). Additionally, there were two invited tutorials by Holger Hermanns and
Joost-Pieter Katoen (Twente University, NL), and John Hatcliff (Kansas State
University, USA). The conference had five satellite events:

- EXPRESS 2001 (Expressiveness in Concurrency), organized by Luca Aceto
  and Prakash Panangaden, held on 20 August 2001.
- GETCO 2001 (Geometric and Topological Methods in Concurrency), orga-
nized by Martin Raussen, held on 25 August 2001.
- RT-TOOLS (Workshop of Real-Time Tools), organized by Paul Pettersson,
held on 20 August 2001.
- MTCS 2001 (Models for Time-Critical Systems), organized by Flavio Cor-
radini and Walter Vogler, held on 25 August 2001.
- FATES 2001 (Formal Approaches to Testing of Software), organized by Jan
  Tretmans and Ed Brinksma, held on 25 August 2001.
We would like to thank all the Program Committee members and the sub-
referees who assisted in their work. Also, the Local Organization Chair, Anna
Ingólfsdóttir, and the other members of the Local Organization, Luca Aceto and
Arne Skou, and further members of BRICS deserve our gratitude for their con-
tributions throughout the preparations. Thanks to the Workshop Chair, Hans
Hüttel, and the workshop organizers. We would also like to thank the invited
speakers and invited tutorial speakers, the authors of submitted papers, and all
the participants of the conference. Special thanks to Brian Nielsen for installing
and managing the START Conference system.

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Science at Aalborg University, BRICS, and the City of Aalborg.

June 2001

Kim Guldstrand Larsen and Mogens Nielsen
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