

Proceedings 18th International Workshop on Expressiveness in Concurrency (Aachen, Germany, September 5, 2011)

Citation for published version (APA):
Luttik, B., & Valencia, F. D. (Eds.) (2011). Proceedings 18th International Workshop on Expressiveness in Concurrency (Aachen, Germany, September 5, 2011). (Electronic Proceedings in Theoretical Computer Science; Vol. 64). EPTCS. https://doi.org/10.4204/EPTCS.64

DOI:

10.4204/EPTCS.64

Document status and date:

Published: 01/01/2011

Document Version:

Publisher's PDF, also known as Version of Record (includes final page, issue and volume numbers)

Please check the document version of this publication:

- A submitted manuscript is the version of the article upon submission and before peer-review. There can be important differences between the submitted version and the official published version of record. People interested in the research are advised to contact the author for the final version of the publication, or visit the DOI to the publisher's website.
- The final author version and the galley proof are versions of the publication after peer review.
- The final published version features the final layout of the paper including the volume, issue and page numbers.

Link to publication

General rights

Copyright and moral rights for the publications made accessible in the public portal are retained by the authors and/or other copyright owners and it is a condition of accessing publications that users recognise and abide by the legal requirements associated with these rights.

- · Users may download and print one copy of any publication from the public portal for the purpose of private study or research.
- You may not further distribute the material or use it for any profit-making activity or commercial gain
 You may freely distribute the URL identifying the publication in the public portal.

If the publication is distributed under the terms of Article 25fa of the Dutch Copyright Act, indicated by the "Taverne" license above, please follow below link for the End User Agreement:

www.tue.nl/taverne

Take down policy

If you believe that this document breaches copyright please contact us at:

openaccess@tue.nl

providing details and we will investigate your claim.

Download date: 17 Nov. 2023

arXiv:1108.4077v1 [cs.LO] 20 Aug 2011

DOI: 10.4204/EPTCS.64 **ISSN:** 2075-2180

EPTCS 64

Proceedings 18th International Workshop on Expressiveness in Concurrency

Aachen, Germany, 5th September 2011

Edited by: Bas Luttik and Frank Valencia

Preface	
Graphical representation of covariant-contravariant modal formulae Luca Aceto, Ignacio Fábregas, David de Frutos-Escrig, Anna Ingólfsdóttir and Miguel Palomino	1
Information Flow Safety in Multiparty Sessions Sara Capecchi, Ilaria Castellani and Mariangiola Dezani-Ciancaglini	16
Read Operators and their Expressiveness in Process Algebras Flavio Corradini, Maria Rita Di Berardini and Walter Vogler	31
Termination in a Pi-calculus with Subtyping Ioana Cristescu and Daniel Hirschkoff	44
Soft Session Types Ugo Dal Lago and Paolo Di Giamberardino	59
Linearization of CIF Through SOS Damian Nadales Agut and Michel Reniers	74
Synchrony vs Causality in the Asynchronous Pi-Calculus Kirstin Peters, Jens-Wolfhard Schicke and Uwe Nestmann	89
A Logic with Reverse Modalities for History-preserving Bisimulations Iain Phillips and Irek Ulidowski	104
Synchrony vs. Causality in Asynchronous Petri Nets Jens-Wolfhard Schicke, Kirstin Peters and Ursula Goltz	119

Preface

This volume contains the proceedings of the 18th international workshop on Expressiveness in Concurrency (EXPRESS'11) which was held on September 5, 2011 in Aachen, Germany, as a satellite event of CONCUR'11.

The purpose of the EXPRESS workshops is to bring together researchers interested in the relations between various formal systems, particularly in the field of Concurrency. Their focus has traditionally been on the comparison of programming concepts (such as concurrent, functional, imperative, logic and object-oriented programming) and of models of computation (such as process algebras, Petri nets, event structures and rewrite systems) on the basis of their relative expressive power. The EXPRESS workshop series has run successfully since 1994 and over the

years this focus has become broadly construed. We now solicit contributions on formal models that broadly relate to concurrency (e.g., also including computational paradigms such as quantum computing, biocomputing, game-theoretic models, and service-oriented computing), and logics to reason about such formal models.

In response to this year's call for papers, we received twelve paper submissions. The programme committee selected nine papers for presentation at the workshop. These proceedings contain these selected contributions. The workshop also had two invited presentations:

- Applied Process Calculi Made Easy as Pi by Björn Victor, and
- Why Modal Characterizations of Process Semantics Totally Rock by Wan Fokkink (joint with SOS'11).

We would like to thank the authors of the submitted papers, the invited speakers, the members of the programme committee, and their subreviewers for their contribution to both the meeting and this volume. We also thank the CONCUR'11 organizing committee for hosting EXPRESS'11. Finally, we would like to thank our EPTCS editor Rob van Glabbeek for publishing these proceedings and his help during the preparation.

Bas Luttik and Frank D. Valencia, Eindhoven and Paris, August 2011.

Programme Committee

Filippo Bonchi, CNRS & ENS Lyon, France
Sibylle Fröschle, Universität Oldenburg, Germany
Rob van Glabbeek, NICTA, Sydney, Australia
Cosimo Laneve, University of Bologna, Italy
Bas Luttik, Eindhoven University of Technology, The Netherlands
Sergio Maffeis, Imperial College London, United Kingdom
Faron Moller, Swansea University, United Kingdom
Philippe Schnoebelen, LSV, CNRS & ENS Cachan, France
Jiří Srba, Aalborg University, Denmark
Jan Strejček, Masaryk University, Brno, Czech Republic
Alwen Tiu, The Australian National University, Canberra, Australia
Frank Valencia, LIX, CNRS & École Polytechnique, France

External Reviewers

Paolo Baldan
Silvia Crafa
Yuxin Deng
Pierre-Malo Denielou
Cinzia Di Giusto
Uli Fahrenberg
Marco Giunti
Kenneth Yrke Jørgensen
Ivan Lanese
Sergueï Lenglet
Mohammad Mousavi
Luca Padovani
Jeremy Planul
Jorge A. Pérez
Jules Villard