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# Algebra and Coalgebra in Computer Science

Third International Conference, CALCO 2009  
Udine, Italy, September 7-10, 2009  
Proceedings

## Volume Editors

Alexander Kurz  
University of Leicester  
Department of Computer Science  
University Road, Leicester, LE1 7RH, UK  
E-mail: kurz@mcs.le.ac.uk

Marina Lenisa  
Università di Udine  
Dipartimento di Matematica e Informatica  
via delle Scienze, 206, 33100 Udine, Italy  
E-mail: marina.lenisa@dimi.uniud.it

Andrzej Tarlecki  
Warsaw University  
Faculty of Mathematics, Informatics and Mechanics  
ul. Banacha 2, 02-097 Warsaw, Poland  
E-mail: tarlecki@mimuw.edu.pl

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# Preface

CALCO, the Conference on Algebra and Coalgebra in Computer Science, is a high-level, bi-annual conference formed by joining CMCS (the International Workshop on Coalgebraic Methods in Computer Science) and WADT (the Workshop on Algebraic Development Techniques). CALCO brings together researchers and practitioners to exchange new results related to foundational aspects and both traditional and emerging uses of algebras and coalgebras in computer science. The study of algebra and coalgebra relates to the data, process and structural aspects of software systems. CALCO is supervised by the Steering Committee, co-chaired by José Luiz Fiadeiro and Jan Rutten.

The first two CALCO conferences took place in 2005 in Swansea, Wales, and in 2007 in Bergen, Norway. CALCO 2009, the third event in the series, took place in Udine, Italy, during September 7–10, 2009.

CALCO 2009 received 42 submissions, out of which 23 were selected for presentation at the conference. In spite of a relatively low number of submissions, their standard was generally very high. The selection process was carried out by the Program Committee, taking into account the originality, quality and relevance of the material presented in each submission, based on the opinions of expert reviewers, four for each submission. The selected and revised papers are included in this volume, together with the contributions from the invited speakers Mai Gehrke, Conor McBride, Prakash Panangaden and Gordon Plotkin.

CALCO 2009 was preceded by two workshops. The CALCO Young Researchers Workshop, CALCO-jnr, was dedicated to presentations by PhD students and by those who completed their doctoral studies within the past few years. CALCO-jnr was organized by Magne Haveraaen, Marina Lenisa, John Power and Monika Seisenberger. The CALCO-tools Workshop, organized by Luigi Liquori and Grigore Roşu, provided presentations of tools, with good time allotted for demonstrations of the running systems. The papers presenting the tools also appear in this volume.

We wish to thank all the authors who submitted their papers to CALCO 2009, the Program Committee for its hard work, and the referees who supported the Program Committee in the evaluation and selection process.

We are grateful to the University of Udine for hosting CALCO 2009 and to the Organizing Committee, chaired by Marina Lenisa, for all the local arrangements. We also thank the Amga spa and the Net spa of Udine, the Municipality of Udine, the International Centre for Mechanical Sciences of Udine, and the Fondazione Crup for their financial support. At Springer, Alfred Hofmann and his team supported the publishing process. We gratefully acknowledge the use of EasyChair, the conference management system by Andrei Voronkov.

June 2009

Alexander Kurz  
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# Table of Contents

## Algebraic Effects and Recursive Equations

|                                                                               |    |
|-------------------------------------------------------------------------------|----|
| Adequacy for Infinitary Algebraic Effects (Abstract of Invited Talk) . . . .  | 1  |
| <i>Gordon Plotkin</i>                                                         |    |
| Algebras for Parameterised Monads . . . . .                                   | 3  |
| <i>Robert Atkey</i>                                                           |    |
| Kleene Monads: Handling Iteration in a Framework of Generic Effects . . . . . | 18 |
| <i>Sergey Goncharov, Lutz Schröder, and Till Mossakowski</i>                  |    |
| Complete Iterativity for Algebras with Effects . . . . .                      | 34 |
| <i>Stefan Milius, Thorsten Palm, and Daniel Schwencke</i>                     |    |
| Semantics of Higher-Order Recursion Schemes . . . . .                         | 49 |
| <i>Jiří Adámek, Stefan Milius, and Jiří Velebil</i>                           |    |

## Theory of Coalgebra

|                                                                           |    |
|---------------------------------------------------------------------------|----|
| Coalgebraic Components in a Many-Sorted Microcosm . . . . .               | 64 |
| <i>Ichiro Hasuo, Chris Heunen, Bart Jacobs, and Ana Sokolova</i>          |    |
| Complementation of Coalgebra Automata . . . . .                           | 81 |
| <i>Christian Kissig and Yde Venema</i>                                    |    |
| Characterising Behavioural Equivalence: Three Sides of One Coin . . . . . | 97 |
| <i>Clemens Kupke and Raul Andres Leal</i>                                 |    |

## Coinduction

|                                                                                                                          |     |
|--------------------------------------------------------------------------------------------------------------------------|-----|
| Let's See How Things Unfold: Reconciling the Infinite with the Intensional (Extended Abstract of Invited Talk) . . . . . | 113 |
| <i>Conor McBride</i>                                                                                                     |     |
| Circular Coinduction: A Proof Theoretical Foundation . . . . .                                                           | 127 |
| <i>Grigore Roşu and Dorel Lucanu</i>                                                                                     |     |

## Bisimulation

|                                                                                                  |     |
|--------------------------------------------------------------------------------------------------|-----|
| Approximating Labelled Markov Processes Again!<br>(Invited Talk by Prakash Panangaden) . . . . . | 145 |
| <i>Philippe Chaput, Vincent Danos, Prakash Panangaden, and Gordon Plotkin</i>                    |     |

|                                                                                                                              |     |
|------------------------------------------------------------------------------------------------------------------------------|-----|
| Weak Bisimilarity Coalgebraically .....                                                                                      | 157 |
| <i>Andrei Popescu</i>                                                                                                        |     |
| Coalgebraic Symbolic Semantics .....                                                                                         | 173 |
| <i>Filippo Bonchi and Ugo Montanari</i>                                                                                      |     |
| Relating Coalgebraic Notions of Bisimulation: with Applications to<br>Name-Passing Process Calculi (Extended Abstract) ..... | 191 |
| <i>Sam Staton</i>                                                                                                            |     |
| Traces, Executions and Schedulers, Coalgebraically .....                                                                     | 206 |
| <i>Bart Jacobs and Ana Sokolova</i>                                                                                          |     |
| Non-strongly Stable Orders Also Define Interesting Simulation<br>Relations .....                                             | 221 |
| <i>Ignacio Fábregas, David de Frutos Escrig, and Miguel Palomino</i>                                                         |     |
| <b>Stone Duality</b>                                                                                                         |     |
| Stone Duality and the Recognisable Languages over an Algebra<br>(Invited Talk) .....                                         | 236 |
| <i>Mai Gehrke</i>                                                                                                            |     |
| Free Heyting Algebras: Revisited .....                                                                                       | 251 |
| <i>Nick Bezhanishvili and Mai Gehrke</i>                                                                                     |     |
| Distributive Lattice-Structured Ontologies .....                                                                             | 267 |
| <i>Hans Bruun, Dion Coumans, and Mai Gehrke</i>                                                                              |     |
| A Duality Theorem for Real $C^*$ Algebras .....                                                                              | 284 |
| <i>M. Andrew Moshier and Daniela Petrişan</i>                                                                                |     |
| <b>Game Theory</b>                                                                                                           |     |
| Conway Games, Coalgebraically .....                                                                                          | 300 |
| <i>Furio Honsell and Marina Lenisa</i>                                                                                       |     |
| A Semantical Approach to Equilibria and Rationality .....                                                                    | 317 |
| <i>Dusko Pavlovic</i>                                                                                                        |     |
| <b>Graph Transformation</b>                                                                                                  |     |
| Van Kampen Colimits as Bicolimits in Span .....                                                                              | 335 |
| <i>Tobias Heindel and Paweł Sobociński</i>                                                                                   |     |
| Unfolding Grammars in Adhesive Categories .....                                                                              | 350 |
| <i>Paolo Baldan, Andrea Corradini, Tobias Heindel,<br/>Barbara König, and Paweł Sobociński</i>                               |     |
| <b>Software Development Techniques</b>                                                                                       |     |
| Views on Behaviour Protocols and Their Semantic Foundation .....                                                             | 367 |
| <i>Sebastian S. Bauer and Rolf Hennicker</i>                                                                                 |     |

|                                                                                                   |     |
|---------------------------------------------------------------------------------------------------|-----|
| Correctness, Completeness and Termination of Pattern-Based<br>Model-to-Model Transformation ..... | 383 |
| <i>Fernando Orejas, Esther Guerra, Juan de Lara, and Hartmut Ehrig</i>                            |     |
| Constructor-Based Institutions .....                                                              | 398 |
| <i>Daniel Găină, Kokichi Futatsugi, and Kazuhiro Ogata</i>                                        |     |
| <b>CALCO Tools Workshop</b>                                                                       |     |
| DBtk: A Toolkit for Directed Bigraphs .....                                                       | 413 |
| <i>Giorgio Bacci, Davide Grohmann, and Marino Miculan</i>                                         |     |
| Constraint-Muse: A Soft-Constraint Based System for Music<br>Therapy .....                        | 423 |
| <i>Matthias Hözl, Grit Denker, Max Meier, and Martin Wirsing</i>                                  |     |
| CIRC: A Behavioral Verification Tool Based on Circular Coinduction ...                            | 433 |
| <i>Dorel Lucanu, Eugen-Ioan Goriac, Georgiana Caltais, and<br/>Grigore Roşu</i>                   |     |
| The Priced-Timed Maude Tool .....                                                                 | 443 |
| <i>Leon Bendiksen and Peter Csaba Ölveczky</i>                                                    |     |
| A Tool Proving Well-Definedness of Streams Using Termination<br>Tools .....                       | 449 |
| <i>Hans Zantema</i>                                                                               |     |
| <b>Author Index</b> .....                                                                         | 457 |