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Algebra and Coalgebra in Computer Science

Second International Conference, CALCO 2007
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Proceedings

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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 the forces and reputations of 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.

The first, and very successful, CALCO conference took place in 2005 in Swansea, Wales. The second CALCO took place in 2007 in Bergen, Norway, and was organized by Magne Haveraaen (Chair), Yngve Lamo, Michal Walicki, and Uwe Wolter.

The CALCO Steering Committee consists of Jiří Adámek, Michel Bidoit, Corina Cirstea, José Fiadeiro (Co-chair), H.Peter Gumm, Magne Haveraaen, Bart Jacobs, Hans-Jörg Kreowski, Alexander Kurz, Ugo Montanari, Larry Moss, Till Mossakowski, Peter Mosses, Fernando Orejas, Francesco Parisi-Presicce, John Power, Horst Reichel, Markus Roggenbach, Jan Rutten (Co-chair), and Andrzej Tarlecki.

CALCO 2007 received 57 submissions (including four tool papers), out of which 26 (including two tool papers) were selected for presentation at the conference. Each submission received three or four reviews of high quality. We want to thank the Program Committee and the additional reviewers, who brought in their competence and expertise. They are listed at the end of this preface. The discussion and decision-making took place in March 2007. As for CALCO 2005, all submissions by PC members were accepted only in the case of unanimous agreement, and the decisions were reached without the PC members involved being aware that their papers were under discussion.

The revised papers can be found in this volume, which also includes the papers contributed by the invited speakers: Stephen L. Bloom, Luís Caires, Barbara König, and Glynn Winskel. We wish to express our warmest thanks to all of them.

The technical program of CALCO 2007 was preceded by the CALCO Young Researchers Workshop, CALCO-jnr, 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, John Power, and Monika Seisenberger.

The successful application of algebraic and coalgebraic techniques in practice depends on the availability of good tools. The CALCO-tools workshop, organized by Narciso Marti-Oliet and Grigore Roşu, provided presentations of such tools.

During the presentations, extra time for demonstrations of the running systems was allotted.

The organizers would like to thank Rolf Rosé Jensen for designing the poster, Karl Trygve Kalleberg for designing and creating the CALCO Web pages, and Adrian Rutle for creating and administrating the registration system. Support from IFIP WG1.3 on Foundations of System Specification, Research Council of Norway, Bergen University College, Norway and Department of Informatics, University of Bergen, Norway is gratefully acknowledged.

At Springer, Alfred Hofmann and his team supported the publishing process. The activity of the PC was supported by the Conference Online Service from Dortmund University; and Martin Karusseit patiently answered our numerous questions and problems. Our deepest thanks go to all of them and, last but not least, to all the authors for providing the high-quality contributions that made CALCO 2007 such a successful event.

June 2007

Till Mossakowski
Ugo Montanari
Magne Haveraaen

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