

# Table of Contents

## Invited Topics

A Type-Theoretic Memory Model for Verification of Sequential Java Programs .....	1
<i>Joachim van den Berg, Marieke Huisman, Bart Jacobs and Erik Poll</i>	
From States to Histories .....	22
<i>Manfred Broy</i>	
Principles and Pragmatics of Subtyping in PVS .....	37
<i>Natarajan Shankar and Sam Owre</i>	

## CASL: Language, Methodology and Tools

Extending Casl by Late Binding .....	53
<i>Davide Ancona, Maura Cerioli and Elena Zucca</i>	
Towards an Evolutionary Formal Software-Development Using CASL .....	73
<i>Serge Autexier, Dieter Hutter, Heiko Mantel and Axel Schairer</i>	
Development of Parsing Tools for CASL Using Generic Language Technology .....	89
<i>Mark G. J. van den Brand and Jeroen Scheerder</i>	
Using CASL to Specify the Requirements and the Design: A Problem Specific Approach .....	106
<i>Christine Choppy and Gianna Reggio</i>	
Subsorted Partial Higher-Order Logic as an Extension of CASL .....	126
<i>Till Mossakowski, Anne Haxthausen and Bernd Krieg-Brückner</i>	
Specifying Real Numbers in CASL .....	146
<i>Markus Roggenbach, Lutz Schröder and Till Mossakowski</i>	

## Foundations

Specification Refinement with System F – The Higher-Order Case .....	162
<i>Jo Erskine Hannay</i>	
Guarded Algebras: Disguising Partiality so You Won't Know Whether Its There .....	182
<i>Magne Haveraaen and Eric G. Wagner</i>	
A General Completeness Result in Refinement .....	201
<i>Yoshiki Kinoshita and John Power</i>	

An Institution of Hybrid Systems .....	219
<i>Hugo Lourenço and Amílcar Sernadas</i>	
Realization of Probabilistic Automata: Categorical Approach .....	237
<i>Paulo Mateus, Amílcar Sernadas and Cristina Sernadas</i>	
Specifications in an Arbitrary Institution with Symbols .....	252
<i>Till Mossakowski</i>	
A General Algebraic Framework for Studying Modular Systems .....	271
<i>Fernando Orejas and Elvira Pino</i>	

## Specification of Processes and Interactions

History Preserving Bisimulation for Contextual Nets .....	291
<i>Paolo Baldan, Andrea Corradini and Ugo Montanari</i>	
A Model for Interaction of Agents and Environments .....	311
<i>Alexander Letichevsky and David Gilbert</i>	
Algebra-Coalgebra Structures and Bialgebras .....	329
<i>Ataru T. Nakagawa</i>	
A Uniform Model Theory for the Specification of Data and Process Types .....	348
<i>Horst Reichel</i>	

## Other Topics

Relating Abstract Datatypes and Z-Schemata .....	366
<i>Hubert Baumeister</i>	
Algebraic Specification of Operator-Based Multimedia Scenarios .....	383
<i>Didier Bert and Stéphane Lo Presti</i>	
Higher-Order Logic and Theorem Proving for Structured Specifications ...	401
<i>Tomasz Borzyszkowski</i>	
Extraction of Structured Programs from Specification Proofs .....	419
<i>John N. Crossley, Iman Poernomo and Martin Wirsing</i>	
Towards a Verification Logic for Rewriting Logic .....	438
<i>José Luis Fiadeiro, Tom Maibaum, Narciso Martí-Oliet, Jose Meseguer and Isabel Pita</i>	
The Rôle of Normalisation in Testing from Structured Algebraic Specifications .....	459
<i>Patricia D. L. Machado</i>	

<b>Author Index</b> .....	477
---------------------------	-----

Recent Trends in Algebraic Development Techniques  
14th International Workshop, WADT '99, Chateau de  
Bonas, September 15-18, 1999 Selected Papers  
Bert, D.; Choppy, C.; Mosses, P. (Eds.)  
2000, X, 490 p., Softcover  
ISBN: 978-3-540-67898-4