

Table of Contents

Invited Talk 1

On a Method of Global Optimization	1
<i>Wen-tsun Wu</i>	

Session 1

Observing Asymmetry and Mismatch	2
<i>Xiaoju Dong, Yuxi Fu</i>	
Expressive Synchronization Types for Inheritance in the Join Calculus	20
<i>Qin Ma, Luc Maranget</i>	
Term Graph Rewriting for the π -Calculus	37
<i>Fabio Gadducci</i>	
Useless-Code Elimination and Program Slicing for the Pi-Calculus	55
<i>Naoki Kobayashi</i>	

Session 2

Constraint Functional Logic Programming for Origami Construction	73
<i>Tetsuo Ida, Mircea Marin, Hidekazu Takahashi</i>	
A Typeful and Tagless Representation for XML Documents	89
<i>Dengping Zhu, Hongwei Xi</i>	
Dataflow Pointcut in Aspect-Oriented Programming	105
<i>Hidehiko Masuhara, Kazunori Kawauchi</i>	

Session 3

Affine-Based Size-Change Termination	122
<i>Hugh Anderson, Siau-Cheng Khoo</i>	
Using Locality of Flow in Dataflow Analyses	141
<i>Ravindra D V</i>	
A Differential Fixpoint Evaluation Framework for Non-distributive Systems	159
<i>Joonseon Ahn, Yong Jin Kwon</i>	

Invited Talk 2

Model Checking: From Hardware to Software	176
<i>Thomas A. Henzinger</i>	

Session 4

Executing Verified Compiler Specification	178
<i>Koji Okuma, Yasuhiko Minamide</i>	
Controlling and Optimizing the Usage of One Resource	195
<i>Antoine Galland, Mathieu Baudet</i>	
Resource Usage Verification	212
<i>Kim Marriott, Peter J. Stuckey, Martin Sulzmann</i>	
Automatic Construction of Hoare Proofs from Abstract Interpretation Results	230
<i>Sunae Seo, Hongseok Yang, Kwangkeun Yi</i>	

Session 5

A Program Inverter for a Functional Language with Equality and Constructors	246
<i>Robert Glück, Masahiko Kawabe</i>	
Rebuilding a Tree from Its Traversals: A Case Study of Program Inversion	265
<i>Shin-Cheng Mu, Richard Bird</i>	
Type Inference with Structural Subtyping: A Faithful Formalization of an Efficient Constraint Solver	283
<i>Vincent Simonet</i>	

Session 6

Continuation Semantics for Parallel Haskell Dialects.	303
<i>Mercedes Hidalgo-Herrero, Yolanda Ortega-Mallén</i>	
Translating a Continuous-Time Temporal Logic into Timed Automata ...	322
<i>Guangyuan Li, Zhisong Tang</i>	
The Semantic Layers of Timber	339
<i>Magnus Carlsson, Johan Nordlander, Dick Kieburtz</i>	

Invited Talk 3

Scrap Your Boilerplate	357
<i>Simon Peyton Jones, Ralf Lämmel</i>	

Session 7

Correctness of a Higher-Order Removal Transformation through a Relational Reasoning	358
<i>Susumu Nishimura</i>	
Extensional Polymorphism by Flow Graph Dispatching	376
<i>Jun Furuse</i>	
Register Allocation Based on a Reference Flow Analysis	394
<i>Dae-Hwan Kim, Hyuk-Jae Lee</i>	
Lazy Stack Copying and Stack Copy Sharing for the Efficient Implementation of Continuations.....	410
<i>Tomoharu Ugawa, Nobuhisa Minagawa, Tsuneyasu Komiya, Masahiro Yasugi, Taiichi Yuasa</i>	
Author Index	421



<http://www.springer.com/978-3-540-20536-4>

Programming Languages and Systems

First Asian Symposium, APLAS 2003, Beijing, China,

November 27-29, 2003, Proceedings

Ohori, A. (Ed.)

2003, XIV, 434 p., Softcover

ISBN: 978-3-540-20536-4