

Contents

Formal Methods (1)

Towards an Object Calculus	1
<i>Oscar Nierstrasz</i>	
On Asynchronous Communication Semantics	21
<i>Kohei Honda and Mario Tokoro</i>	
A Unifying Framework for Process Calculus Semantics of Concurrent Object-Oriented Languages	53
<i>Michael Papathomas</i>	

Formal Methods (2)

A Sheaf Semantics for FOOPS Expressions	81
<i>D.A. Wolfram and Joseph A. Goguen</i>	
Semantic Layers of Object-Based Concurrent Computing	99
<i>Etsuya Shibayama</i>	
Formal Techniques for Parallel Object-Oriented Languages	119
<i>Pierre America</i>	
Traces Semantics for Actor Systems	141
<i>Vasco Vasconcelos and Mario Tokoro</i>	

Concurrent Programming

Dynamic Programming as Multiagent Programming	163
<i>Jean-Marc Andreoli, Remo Pareschi, and Marc Bourgois</i>	
Scheduling Predicates	177
<i>Ciaran McHale, Bridget Walsh, Seán Baker, and Alexis Donnelly</i>	
A Concurrency Control Mechanism for C++ Objects	195
<i>Hayssam Saleh and Philippe Gauthron</i>	

Models

Object-Oriented Concurrent Reflective Architectures	211
<i>Satoshi Matsuoka, Takuo Watanabe, Yuuji Ichisugi, and Akinori Yonezawa</i>	
Abstract Description of Distributed Object Systems	227
<i>Thorsten Hartmann and Ralf Jungclauss</i>	
Design Issues for Object-Based Concurrency	245
<i>Peter Wegner</i>	
Panel: What Is An Object?	257
Moderator:	Peter Wegner
Panelists:	Pierre America
	Robin Milner
	Oscar Nierstrasz
	Mario Tokoro
	Akinori Yonezawa
Author Index	265