BRICS Notes Series, Abstracts, 1999

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This document is also available as *PostScript* and *DVI*.

References

[NS-99-3] *PostScript*, *PDF*.
Peter D. Mosses and David A. Watt, editors.
Proceedings of the Second International Workshop on Action Semantics, AS '99, (Amsterdam, The Netherlands, March 21, 1999), May 1999.
iv+172 pp.
Abstract: Action Semantics is a practical framework for formal semantic description of programming languages. Since its appearance in 1992, action semantics has been used to describe major languages such as Pascal, SML, ANDF, and Java, and various tools for processing action-semantic descriptions have been developed. Recently, the close relationship between action semantics and monadic approaches to denotational semantics has been established.

AS'99, the 2nd International Workshop on Action Semantics, was held as a one-day satellite event of ETAPS'99 in Amsterdam. As can be seen from the workshop programme and from the contributed papers collected in these proceedings, much interesting work was presented and discussed during the workshop, focussing on tool support for Action Semantics, recent action-semantic descriptions, theoretical foundations, and prospects for the future of Action Semantics.

[NS-99-2] *PostScript*, *PDF*.
Hans Httel, Josva Kleist, Uwe Nestmann, and Antnio Ravara, editors.
Proceedings of the Workshop on Semantics of Objects As Processes, SOAP '99, (Lisbon, Portugal, June 15, 1999), May 1999.
iv+64 pp.
Abstract: The '99 edition of SOAP, taking place as a satellite workshop of ECOOP '99, is composed of two complementary thematic building blocks. The first is addressing the motto 'Semantics of Objects *As* Processes' literally in that objects are represented as a derived concept within a framework of processes; we are happy to welcome Oscar Nierstrasz, Markus Lumpe, and Jean-Guy Schneider as invited speakers to present the work they have

been accomplishing in this area—starting out from a mobile process calculus—and to let us learn about their conclusions. This session is rounded up by a verification approach using a temporal logic as a target setting for, in this case, UML-style objects. The second building block, divided into a session on behavioral subtyping and another one on behavioral typing, is more to be seen as an adaptation of the process-theoretic viewpoint to some object-oriented framework. While the typed λ-calculus is a firm ground to study typing for object-oriented languages, the typing of concurrent objects poses particular problems due to synchronization constraints. A static notion of typing is not powerful enough to capture dynamic properties of objects' behavior, like non-uniform service availability. Concurrency theory inspires dynamic notions of typing and subtyping, and the works that constitute this block of SOAP '99 exemplify the research currently being done in the field.

[NS-99-1] Olivier Danvy, editor.
ACM SIGPLAN Workshop on Partial Evaluation and Semantics-Based Program Manipulation, PEPM '99, (San Antonio, Texas, USA, January 22–23, 1999), January 1999.

Abstract: The PEPM '99 workshop brought together researchers working in the areas of semantics-based program manipulation and partial evaluation. The workshop focused on techniques and supporting theory for the analysis and manipulation of programs.

PEPM '99 took place on January 22nd and 23rd, 1999, following POPL '99. It consisted of 13 contributed papers, as well as three invited talks by Alan Bawden, Charles Consel, and Olin Shivers. The present BRICS technical report (distributed at the workshop) served as an informal proceedings. The 13 papers were selected among 24 submissions. These submissions came from all over the world: US, UK, France, Germany, Denmark, Spain, Australia, New Zealand, Japan, and Singapore, incidentally all from academia. 85 reviews were generated (3.5 per submission).