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Full abstraction for polymorphic π -calculus. (English) Zbl 1134.68040
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Summary: The problem of finding a fully abstract model for the polymorphic π -calculus was stated in *B. C. Pierce* and *D. Sangiorgi's* work in [J. ACM 47, No. 3, 531–584 (2000; Zbl 1094.68591)] and has remained open since then. In this paper, we show that a variant of their language has a fully abstract model, which does not depend on type unification or logical relations. This is the first fully abstract model for a polymorphic concurrent language. In addition, we discuss the relationship between our work and Pierce and Sangiorgi's, and show that their model based on type unification is sound but not complete.

MSC:

68Q85 Models and methods for concurrent and distributed computing (process algebras, bisimulation, transition nets, etc.)

Full Text: [DOI](#)

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