

Hoogers, P. W.; Kleijn, H. C. M.; Thiagarajan, P. S.

A trace semantics for Petri nets. (English) Zbl 0826.68085
Inf. Comput. 117, No. 1, 98-114 (1995).

Summary: A generalization of the notion of trace is proposed. This enables us to associate with each Petri net a single behavioural object, namely a poset of (generalized) traces. A generalization is given of the trace languages defined by Petri nets. We show that the general event structures of Winskel and the stable event structures can also be characterized in terms of our trace languages. One consequence is that in this framework, stable event structures, general event structures, and Petri nets constitute a strictly ascending chain in terms of expressive power.

MSC:

- [68Q85](#) Models and methods for concurrent and distributed computing (process algebras, bisimulation, transition nets, etc.)
- [68Q55](#) Semantics in the theory of computing
- [68Q45](#) Formal languages and automata

Cited in 11 Documents

Keywords:

[Petri nets](#)

Full Text: [DOI](#)