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Open ended systems, dynamic bisimulation and tile logic. (English) Zbl 0998.68087

van Leeuwen, Jan (ed.) et al., Theoretical computer science. Exploring new frontiers of theoretical informatics. International conference IFIP TCS 2000, Sendai, Japan, August 17-19, 2000. Proceedings. Berlin: Springer. Lect. Notes Comput. Sci. 1872, 440-456 (2000).

Summary: The SOS formats ensuring that bisimilarity is a congruence often fail in the presence of structural axioms on the algebra of states. Dynamic bisimulation, introduced to characterize the coarsest congruence for CCS which is also a (weak) bisimulation, reconciles the bisimilarity as congruence property with such axioms and with the specification of open ended systems, where states can be reconfigured at run-time, at the cost of an infinitary operation at the meta-level. We show that the compositional framework offered by the logic is suitable to deal with structural axioms and open ended systems specifications, allowing for a finitary presentation of context closure.

For the entire collection see [[Zbl 0944.00071](#)].

MSC:

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

Cited in **5** Documents

Keywords:

[bisimulation](#); [SOS formats](#); [dynamic bisimulation](#); [tile logic](#)