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On the μ -calculus over transitive and finite transitive frames. (English) Zbl 1208.68145
Theor. Comput. Sci. 411, No. 50, 4273-4290 (2010).

Summary: We prove that the modal μ -calculus collapses to first order logic over the class of finite transitive frames. The proof is obtained by using some byproducts of a new proof of the collapse of the μ -calculus to the alternation free fragment over the class of transitive frames.

Moreover, we prove that the modal μ -calculus is Büchi and co-Büchi definable over the class of all models where, in a strongly connected component, vertexes are distinguishable by means of the propositions they satisfy.

MSC:

[68Q60](#) Specification and verification (program logics, model checking, etc.)
[03B45](#) Modal logic (including the logic of norms)

Cited in **3** Documents

Keywords:

[fixed points](#); [modal \$\mu\$ -calculus](#); [alternation hierarchy](#); [collapse](#); [finite transitive frames](#); [Büchi and co-Büchi definable](#)

Full Text: [DOI](#)

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