

Basis For Passive Inference Rules In The Modal Logic K 4

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Abstract

In [1] and [2] we considered modal logics which are equivalent with respect to unification of formulas and gave a criterion for equivalence via existence or persistent formulas. Applying this criterion we described all non-unifiable formulas in a syntactic way. This is done by finding anti-bases for non-unifiable formulas. On the basis of these results we study passive inference rules. These rules, sometimes, form the basis for all admissible rules. In this paper, we study basis for the passive inference rules in the K 4.

References

- [1] V. V. Rybakov, M. Terziler, C. Gencer, An Essay on Unification and Inference Rules For Modal Logics, Bulletin of the Section of Logic, vol. 28/3, 145-157, 1999.
- [2] V. V. Rybakov, M. Terziler, C. Gencer, Unification and Passive Inference Rules for Modal Logics, Journal of Applied Non-Classical Logics, vol. 10, No: 3-4, 369-377, 2000.