

**Rimatskij, V. V.**

**Finite bases with respect to admissibility for modal logics of width 2.** (English. Russian original) [Zbl 0930.03020](#)

[Algebra Logika 38, No. 4, 436-455 \(1999\)](#); translation in [Algebra Logic 38, No. 4, 237-247 \(1999\)](#).

Summary: It is proven that every finitely approximable and residually finite modal logic of depth 2 over  $K4$  has a finite basis of admissible inference rules. This, in particular, implies that every finitely approximable residually finite modal logic of depth at most 2 is finitely based with respect to admissibility. (Among the logics of a larger depth or width, there are logics which do not have a finite, or even independent, basis of admissible rules of inference).

**MSC:**

[03B45](#) Modal logic (including the logic of norms)

[03G25](#) Other algebras related to logic

[08C15](#) Quasivarieties

Cited in **2** Documents

**Keywords:**

[frame](#); [finite basis of admissible inference rules](#); [residually finite modal logic](#); [finitely approximable modal logic](#)