

Remarks on Tarski's elimination

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Abstract. Tarski's elimination theorem (stating that, in the structure of reals, any first-order formula in the language of ordered fields is equivalent to a quantifier-free formula) is fundamental for several areas including computer algebra. In this talk, we discuss some earlier and some newer facts about possible extensions and applications of Tarski's theorem and some other results of interest for symbolic and numeric computations. In particular, we concentrate on relationships of this topic with the theory of computable models and constructive mathematics.

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