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Abstracts of Short Communications and Posters

Section:

1. Logic

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Expressive possibilities of finitely axiomatizable theories

General expressibility problem of finitely axiomatizable theories in first-order predicate logic is decided. An universal construction is described which shows that in terms of the majority of natural model-theoretic properties the expressive power of finitely axiomatizable theories is the same as that of recursively axiomatizable theories. A lot of natural questions on finitely axiomatizable theories is solved by reduction to the considerably easier case of recursively axiomatizable theories. Some intermediate construction of finitely axiomatizable theories was represented [1]. The universal construction is described [2].

References: [1] M. G. Peretyat'kin, Finitely axiomatizable theories, *Proc. Intern. Congress Mathematicians*, Berkeley, USA (1986), **1**, 322–330 (Russian); English translation: *Amer. Math. Soc. Transl.* , (2) **147** (1990), 11–19. [2] M. G. Peretyat'kin, Finitely axiomatizable theories, *Plenum*, New York (1997), 294p.