Paul Schupp

University of Illinois at Urbana-Champaign

Finitely generated groups with co-c.e. word problem (d'après Morozov)

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Abstract:
Let $\mathcal{C}$ be the group of all computable permutations of the natural numbers. The general question is: What can one say about finitely generated subgroups of $\mathcal{C}$? While most groups studied in geometric group theory have computably enumerable word problems, one sees immediately that a finitely generated subgroup of $\mathcal{C}$ must have co-c.e. word problem, that is, the set of words equal to the identity in G is the complement of a computably enumerable set. Andrey Morozov proved two important theorems about finitely generated subgroups of $\mathcal{C}$. We will discuss these theorems and some interesting connections of the basic question to other groups.