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Conjugacy separability of certain HNN extensions. (English)

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A group G is called conjugacy separable if for each pair of elements $x, y \in G$ which are not conjugate in G , there exists a finite homomorphic image \overline{G} of G such that the images of x and y are not conjugate in \overline{G} . In this paper the authors consider the HNN-extension $G = \langle t, K \mid t^{-1}At = B, \varphi \rangle$ where K is a finitely generated abelian group. They prove that if $A \cap B = 1$, then G is conjugacy separable. If $B = A$ and if $A = A_1 \times A_2$ and φ is such that $a_1\varphi = a_1$ for all $a_1 \in A_1$, $a_2\varphi = a_2^{-1}$ for all $a_2 \in A_2$, then again G is conjugacy separable. Here A_1 or A_2 may be trivial. The results of this paper are contained essentially in more general results in the paper by *E. Raptis, O. Talelli* and *D. Varsos* [J. Algebra 199, No. 1, 327-336 (1998; Zbl 891.20023)].

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