Zentralblatt–MATH

Allenby, R.B.J.T.; Tang, C.Y.

Conjugacy separability of certain 1-relator groups with torsion. (English)
J. Algebra 103, 619-637 (1986).

A group A is said to be conjugacy separable if for every pair of elements x, y in A which are not conjugate in A, there exists a finite homomorphic image $\bar{A}$ of A such that the images of x, y in $\bar{A}$ are not conjugate. In this paper it is proved that groups of the form $< b, t;\ (t^{-1}b^{\ell}tb^{m})^{s} >$, where $s > 1$ are conjugacy separable. Among the results used are the following. First a theorem of Dyer which states that the free product of two conjugacy separable groups with a finite amalgamated subgroup is conjugacy separable. Secondly, a theorem of Collins which states that an HNN extension of a conjugacy separable group in which a pair of finite isomorphic subgroups becomes conjugate is conjugacy separable. Finally a theorem of Tang, which states that $< h, k;\ (h^{m}k^{\ell})^{s} > (s > 1)$ is conjugacy separable, is used. The context of the theorem and the known results about conjugacy separability are fully described in the introduction.

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