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ON THE FIXED POINT PROPERTY FOR ONE-RELATOR GROUPS

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Abstract. We say that a group A has the fixed point property (FPP for short) if, whenever A acts on a tree X without inversions, A fixes at least one vertex of X. In this note we prove that subgroups of HNN groups, satisfying (FPP) are contained in conjugates of the base. As application we show that if $G = \langle t, b, c, \ldots ; r\rangle$ is a one-relator group, r is cyclically reduced, and if H is a subgroup of G such that H has the (FPP), then H is contained in a conjugate of a subgroup G_0 of G, where G_0 is a one-relator group whose defining relator has shorter length than r.

Key Words and Phrases: Groups acting on trees without inversions, fixed point property, HMM groups, one-relator groups.
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