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HOMOLOGY OF FINITE INDEX SUBGROUPS OF FINITELY PRESENTED GROUPS

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To the memory of my friend Gheorghe Ionesei

Abstract. Let G be a finitely presented group and p a prime number. We investigate index p normal subgroups of G through their first homology group. For such a group K and a field K of characteristic p, we find that the betti number $b_1(K, \mathbb{K})$ is determined by certain algebraic subvarieties of $H^1(G, \mathbb{K})$.

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