THANG LE* (letu@math.gatech.edu), 686 Cherry Street, School of Mathematics, Georgia Institute of Technology, Atlanta, GA 30332. L²-torsion, Mahler measure, and homology growth. Preliminary report.

Using L^2 -torsion of 3-manifolds we proved old and new results about the growth rate of the order of the torsion of the first homology group of finite coverings of a knot (or link) complement. (Received February 06, 2009)