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Ilesanmi Adeboye* (adeboye@usc.edu), 3620 South Vermont Avenue, KAP 108, Los Angeles, CA 90089. *Volumes of hyperbolic orbifolds.*

A complete orientable hyperbolic n -orbifold is an orbit space \mathbb{H}^n/Γ , where Γ is a discrete group of orientation-preserving isometries of \mathbb{H}^n . In this talk an explicit formula for a lower bound on the volume of a hyperbolic orbifold, dependent on dimension and the maximal order of torsion in the orbifold's fundamental group, is constructed. As an application, we will derive an upper bound on the order of $\text{Out}(\pi_1(M))$ for a finite volume hyperbolic n -manifold M . (Received September 11, 2007)