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Marc Culler* (culler@math.uic.edu), MSCS Department M/C 249, University of Illinois at Chicago, 851 S. Morgan St., Chicago, IL 60607-7045, and **Peter B. Shalen**, MSCS Department M/C 249, University of Illinois at Chicago, 851 S. Morgan St., Chicago, IL 60607-7045. *Margulis numbers for Haken manifolds*. Preliminary report.

A positive number μ is said to be a Margulis number for a given closed hyperbolic 3-manifold M if each component of the $\mu/2$ -thin set in M is a tube about a geodesic of length less than μ . The Margulis Lemma says that there exists a positive number which is a Margulis number for every closed hyperbolic 3-manifold. Thus we can define the Margulis constant for a class of closed hyperbolic 3-manifolds to be the supremum of the set of numbers which serve as Margulis numbers for every manifold in the class. In this paper we determine a lower bound for the Margulis constant of the class of Haken hyperbolic 3-manifolds. This bound is significantly larger than the largest known lower bound for the Margulis constant of the class of all hyperbolic 3-manifolds. (Received March 30, 2010)