

1035-57-1669

John Hempel* (hempel@rice.edu), Mathematica Dept., Rice University, 6100 Main St., Houston, TX 77005-1892. *Lower bounds for the distance of a Heegaard splitting.* Preliminary report.

The *distance* of a Heegaard splitting (M, S) of a 3-manifold M is the minimal distance, in the curve complex of S , between simple closed curves bounding disks on opposite sides of S . We will discuss progress on the program to provide lower bounds for the distance of a splitting in terms of data extracted from a Heegaard diagram for the splitting, and will describe conditions for the case $g(S) = 2$ and *distance* ≥ 3 . (Received September 20, 2007)