

1061-57-54

Marion Moore Campisi* (marion@math.ucdavis.edu) and **Matt Rathbun**. *High distance knots in closed 3-manifolds.*

Let M be a closed 3-manifold with a given Heegaard splitting. We show that after a single stabilization, some core of the stabilized splitting has arbitrarily high distance with respect to the splitting surface. This generalizes a result of Minsky, Moriah, and Schleimer for knots in S^3 . We also show that in the complex of curves, handlebody sets are either coarsely distinct or identical. We define the *coarse mapping class group of a Heegaard splitting*, and show that if (S, V, W) is a Heegaard splitting of genus ≥ 2 , then $\mathcal{CMCG}(S, V, W) \cong \mathcal{MCG}(S, V, W)$. (Received March 26, 2010)