

1060-57-125

Aaron D Magid* (magid@math.udm.edu), University of Maryland, Department of Mathematics, 1301 Mathematics Building, College Park, MD 20742. *The Topology of Deformation Spaces of Kleinian Groups.*

For any 3-manifold M , let $AH(M)$ denote the space of all marked hyperbolic 3-manifolds homotopy equivalent to M . This deformation space of hyperbolic manifolds is naturally a subset of the $PSL(2, \mathbb{C})$ character variety of $\pi_1(M)$. After reviewing some of the classical results that describe topology of the interior of $AH(M)$, we will show that in many cases there are points on the boundary where $AH(M)$ fails to be locally connected. This is a generalization of Ken Bromberg's result that the space of Kleinian punctured torus groups is not locally connected. (Received March 26, 2010)