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Kenneth Bromberg* (bromberg@math.utah.edu), Department of Mathematics, University of Utah, 155 S 1400 E, Salt Lake City, UT 84112. *The topology of deformation spaces of Kleinian groups.*

A Kleinian group is a discrete subgroup of $PSL(2, \mathbb{C})$. They were originally studied by complex analysts but after Thurston's hyperbolization theorem in the seventies they became a central topic in low dimensional topology and hyperbolic geometry. In the last decade many of the classical conjectures for Kleinian groups have been solved: Marden's tameness conjecture, the Bers-Sullivan-Thurston density conjecture and Thurston's ending lamination conjecture. This last conjecture gives a complete classification of finitely generated Kleinian groups. However, the classifying map is not a homeomorphism for any natural topology on the space of classifying objects. We will give an overview of what is known about the topology of spaces of Kleinian groups and discuss some open conjectures. (Received February 23, 2010)