

**Meeting:** 1001, Evanston, Illinois, SS 21A, Special Session on Low-Dimensional Topology and Kleinian Groups

1001-57-330      **Francois Gueritaud\*** ([fguerita@usc.edu](mailto:fguerita@usc.edu)), Department of Mathematics, University of Southern California, 3620 South Vermont Avenue, KAP 108, Los Angeles, CA 90089-2532. *Punctured torus quasifuchsian groups*. Preliminary report.

We explicitly construct quasifuchsian metrics with a given bending data on the once-punctured torus times the real line. Our general technique is to canonically decompose the manifold into infinitely many topological ideal tetrahedra, and then to use a volume maximization process to find geometric shapes which are compatible with each other. (Received August 30, 2004)