

Ford domains of punctured torus groups and an application to deformation theory

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Abstract

Let M be the manifold obtained from the product of the once-punctured torus and the closed interval by Dehn surgery along an essential simple closed curve in a level surface. In this talk, we will discuss the combinatorial structure of the Ford domain of the Kleinian group obtained as the image of the holonomy representation of a hyperbolic structure on M . The key is that the Kleinian group which we consider is an amalgamated free product of two punctured torus groups, and that the combinatorial structure of the Ford domain of a punctured torus group is studied in detail by T. Jorgensen.