

# Volume of the convex core of a punctured torus group

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For any quasifuchsian punctured torus group, the Weil-Petersson distance between the conformal structure of the boundary Riemann surface and the Jorgensen's side parameter is bounded above by a universal constant. J. Brock showed that the volume of the convex core of a quasifuchsian manifold is quasi-comparable to the Weil-Petersson distance between the conformal structures of the boundary Riemann surfaces. Combining these theorems, the volume of the convex core of a quasifuchsian punctured torus group is estimated by a combinatorial structure of the Ford domain of the group.