

# Quasi-fuchsian groups, average bending, and pleated surfaces

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102 Bradley Hall, 4:00 pm  
(Tea 3:30 pm Math Lounge)

## Abstract

We define the average bending of a geodesic on the boundary of the convex hull of a quasi-fuchsian group and prove that it is universally bounded by a number  $K$ . We use this to prove that  $1 + K$  is a universal bound on the lipschitz constant for the map from the intrinsic hyperbolic structure on the convex hull boundary to the hyperbolic structure on the domain of discontinuity facing it. We further prove that the length of the bending lamination of the convex hull of a quasi-fuchsian group is bounded by  $K\pi^2$  times the euler characteristic of the underlying surface