

**Bonfert-Taylor, Petra; Taylor, Edward C.**

**Quasiconformal groups, Patterson-Sullivan theory, and local analysis of limit sets.** (English)

Zbl 1013.30024

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The authors extend some aspects of the Patterson-Sullivan theory, that is, the construction of a class of finite positive measures on the limit set of a Kleinian group and the relation between the exponent of convergence of the Poincaré series of the action and the Hausdorff dimension of the limit set. The extension concerns the setting of quasiconformal Fuchsian groups, that is, discrete groups of uniformly  $K$ -quasi-conformal mappings preserving the closed unit ball  $B^n$ . In doing so, the authors define some new bi-Lipschitz invariants that localize both the exponent of convergence and the Hausdorff dimension.

Reviewer: Athanase Papadopoulos (Strasbourg)

**MSC:**

**30F40** Kleinian groups (aspects of compact Riemann surfaces and uniformization)

Cited in 2 Documents

**30F45** Conformal metrics (hyperbolic, Poincaré, distance functions)

**30C65** Quasiconformal mappings in  $\mathbb{R}^n$ , other generalizations

**Keywords:**

Kleinian groups; discrete quasi-conformal groups; Patterson-Sullivan measure; exponent of convergence; Hausdorff dimension

**Full Text:** DOI

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