

Kapovich, Ilya; Lustig, Martin**Invariant laminations for irreducible automorphisms of free groups.** (English) Zbl 1348.20035
Q. J. Math. 65, No. 4, 1241-1275 (2014).

Summary: For every irreducible hyperbolic automorphism φ of F_N (i.e. the analog of a pseudo-Anosov mapping class) it is shown that the algebraic lamination dual to the forward limit tree $T_+(\varphi)$ is obtained as 'diagonal closure' of the support of the backward limit current $\mu_-(\varphi)$. This diagonal closure is obtained through a finite procedure analogous to adding diagonal leaves from the complementary components to the stable lamination of a pseudo-Anosov homeomorphism. We also give several new characterizations as well as a structure theorem for the dual lamination of $T_+(\varphi)$, in terms of Bestvina-Feighn-Handel's 'stable lamination' associated to φ .

MSC:

20E36 Automorphisms of infinite groups
20E05 Free nonabelian groups
20F65 Geometric group theory
37D20 Uniformly hyperbolic systems (expanding, Anosov, Axiom A, etc.)
57M07 Topological methods in group theory

Cited in **1** Review
Cited in **5** Documents**Keywords:**

irreducible automorphisms; hyperbolic automorphisms; free groups; algebraic lamination; pseudo-Anosov homeomorphisms

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