Laminations of the Unit Disk and Cubic Julia Sets

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Laminations of the unit disk were introduced by William Thurston as a topological/combinatorial model for understanding the (connected) Julia sets of polynomials, with focus on quadratic (degree d = 2) polynomials. This understanding can be extended, at least partially, to laminations corresponding to connected Julia sets for degree $d \ge 3$ polynomials; the Julia set is the monotone image of the lamination with semiconjugate dynamics. We focus on laminations of degree 3, and in particular, on degree 3 laminations that contain an *identity return* leaf or triangle. In the case of unicritical degree 3 polynomials, a connection between parameter spaces (laminational and analytic) is asserted.

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¹ With thanks for support by the University of Alabama at Birmingham, Department of Mathematics.



