

1106-37-1964

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Continuity of core entropy of quadratic polynomials.

The core entropy of polynomials, recently introduced by W. Thurston, is a dynamical invariant which can be defined purely in combinatorial terms, and provides a useful tool to study parameter spaces of polynomials. The theory of core entropy extends to complex polynomials the entropy theory for real unimodal maps: the real segment is replaced by an invariant tree, known as Hubbard tree, which lives inside the filled Julia set. We prove that the core entropy of quadratic polynomials varies continuously as a function of the external angle, answering a question of Thurston. (Received September 15, 2014)