

1131-37-358

Timothy C Wilson* (timothywilson@my.unt.edu). *Continuity of Hausdorff Dimension in Hyperbolic Polynomials.*

We consider a family of hyperbolic polynomials $P_\lambda : \mathbb{C} \rightarrow \mathbb{C}$ defined by $P_\lambda(z) = \lambda z^{d+1} + P(z)$ where $P(z)$ is hyperbolic polynomial of degree d . Let $J(P_\lambda)$ be the Julia set of P_λ . Our main result is that the function $\lambda \mapsto h_\lambda := HD(J(P_\lambda))$, $\lambda \in [0, \epsilon)$ is continuous at the point 0. The main tools we use are the associated conformal measures. (Received July 18, 2017)