

Hausdorff dimension of the set of escaping parameters for certain elliptic functions

Let \wp_Λ denote the Weierstrass function with a period lattice Λ . We consider *escaping parameters* in the family $\beta\wp_\Lambda$, i.e. the parameters β for which the orbits of all critical values of $\beta\wp_\Lambda$ approach infinity under iteration. Under additional assumptions on \wp_Λ , we prove that the Hausdorff dimension of the set of escaping parameters in the family $\beta\wp_\Lambda$ is equal to the Hausdorff dimension of the escaping set in the dynamical space. We also show that this analogy holds for a more general family of elliptic function.