



复旦大学数学科学学院 数学综合报告会

报告题目: On the boundary of an immediate attracting basin
of a hyperbolic entire function

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地点: 光华东主楼1801

报告摘要:

Abstract: Let f be an entire function and let z_0 be an attracting periodic point of f . The immediate attracting basin of z_0 is the connected component of the Fatou set that contains z_0 . Points which tend to infinity under iteration are called escaping. It follows from results of McMullen that if $f(z) = \lambda e^z$ has an attracting fixed point, then the set of escaping points in the boundary of the attracting basin has Hausdorff dimension 2. In contrast, Barański, Karpińska and Zdunik showed for such f that if f has an attracting periodic point of period at least 2, then the set of escaping points in the boundary of the attracting basin has Hausdorff dimension 1.

We discuss to which extent these results hold for more general entire functions f .

The results are joint work with Jie Ding.

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