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Abstract

ON MORI'S PROBLEM IN QUASICONFORMAL MAPPINGS

The classical Mori's Theorem states that a K -quasiconformal map $f: \mathbb{D} \rightarrow \mathbb{D}$ fixing the origin is $1/K$ -Hölder continuous with the optimal constant 16. However, allowing this constant to depend leads to improved bounds. We will discuss the different methods for finding improved constants, as well as prove an optimal constant $4^{1-1/K}$ with the modified assumption that f extends to the unit circle as the identity.

References

[P] I. Prause: On a Hölder constant in the theory of quasiconformal mappings, *Comput. Methods. Funct. Theory* 14, 2014, 483–486, F.W. Gehring Memorial Volume.