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Sharp estimates for functions with a pole and logarithmic singularity

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Abstract

We consider functions with a pole and a logarithmic singularity. We obtain sharp estimates for the Schwarzian and the Taylor coefficients of the holomorphic part of such functions. We also describe geometric properties of conformal mappings of the exterior of the unit disc with a cut that connects some boundary point with the point at infinity. © 2011 Allerton Press, Inc.

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Keywords

Coefficient estimates, Conformal mappings, Schwarzian