

## Estimates for integral means of hyperbolically convex functions

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### Abstract

We prove the Meija-Pommerenke conjecture that the Taylor coefficients of hyperbolically convex functions in the disk behave like  $O(\log^2(n)/n)$  as  $n \rightarrow \infty$  assuming that the image of the unit disk under such functions is a domain of bounded boundary rotation. Moreover, we obtain some asymptotically sharp estimates for the integral means of the derivatives of such functions and consider an example of a hyperbolically convex function that maps the unit disk onto a domain of infinite boundary rotation. © 2005 Springer Science+Business Media, Inc.

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### Keywords

Conformal mapping, Hyperbolically convex function, Integral means, Univalent function