
Alan Sola

**An Estimate of the Universal Means Spectrum
of Conformal Mappings**

CMFT 6 No.2 (2006), 423–436. [ISSN 1617-9447]

Abstract. In the theory of conformal mappings, one way of measuring how much a univalent function expands or contracts the unit disk is to study the integral means of its derivative along circles of increasing radii. Recently, Hedenmalm and Shimorin were able to find estimates on the universal means spectrum of conformal maps of the unit disk by using a combination of area-type methods and Bergman space techniques. Their paper included a numerical implementation based on the first two terms in a series expansion. We take three terms into account and show that it is possible to improve the previous results slightly.

Keywords. Universal means spectrum, conformal mapping, Bergman spaces.

2000 MSC. Primary 30C35; Secondary 32A36.

Received. November 24, 2005, in revised form February 21, 2006.