

**Meeting:** 1006, Lubbock, Texas, SS 5A, Special Session on Recent Advances in Complex Function Theory

1006-30-125      **Daniela Kraus** ([dakraus@mathematik.uni-wuerzburg.de](mailto:dakraus@mathematik.uni-wuerzburg.de)), Department of Mathematics, University of Wuerzburg, 97074 Wuerzburg, Germany, and **Oliver Roth\*** ([roth@mathematik.uni-wuerzburg.de](mailto:roth@mathematik.uni-wuerzburg.de)), Department of Mathematics, University of Wuerzburg, 97074 Wuerzburg, Germany. *Weighted distortion in conformal mapping in euclidean, hyperbolic and elliptic geometry.*

Golusin-type inequalities for normalized univalent functions are combined with elementary monotonicity arguments to give quick and simple proofs for numerous sharp two-point distortion theorems for conformal maps from the unit disk into (i) the complex plane equipped with euclidean geometry, (ii) the unit disk equipped with hyperbolic geometry, and (iii) the real projective plane equipped with elliptic geometry. (Received February 11, 2005)