Conformal invariants, hyperbolic type metrics and quasiconformal maps

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Metrics have an important role in geometric function theory, such as the hyperbolic metric, the chordal metric and of course the euclidean metric. There are also several other metrics, to some extent similar to the hyperbolic metric, called hyperbolic type metrics. A survey of hyperbolic type metrics from the point of view of quasiconformal maps is given. Some of these metrics are the quasihyperbolic metric, the visual angle metric, the triangular ratio metric and the distance ratio metric. Also some topics dealing with the case of K-quasiconformal maps when the dilatation K is close to 1 are discussed.

This talk is a partial survey of the work of the author with several coauthors.

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