

The quasihyperbolic metric

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To follow the presentation you do not need to understand any of the mathematical terms below. The presentation will be held in english unless all of the participants understand finnish fluently.

In the presentation we introduce ourself the quasihyperbolic metric, which is in a sense a generalization of the hyperbolic metric of the complex plane. (The exact sense being, that the quasihyperbolic metric equals the hyperbolic metric in unit sphere of the complex plane and is more than 2-bilipschits in the half-plane.) The quasihyperbolic metric has been researched from the 1970s and it has been shown to be of great use for example in quasiconformal geometry.

In the presentation I will present the definition of quasihyperbolic metric, show why it can be thought as a generalization of the hyperbolic metric and prove some basic characteristics of the quasihyperbolic metric. Mainly that the quasihyperbolic metric can always be evaluated downwards with the standard euclidian metric and the cases where a similar evaluation holds upwards is closely related to the so called 'cigar-domains'. (Or 'uniform-domains' in some articles.)