
*Workshop dedicated to the memory of Professor Gabriela Kohr
(2nd edition)*

Geometric Function Theory in Several Complex Variables and Complex Banach Spaces

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Conformal Geometry, Capacity and Computation

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Abstract

This talk is a survey of my latest joint research on computation of conformal capacity, see arXiv 2021-2022. In particular we study the capacity of a family of disjoint hyperbolic disks. The work is based on computational methods and we discuss also several open problems of the field. Two numerical methods are used: fast boundary integral equation method of M.M.S. Nasser and hp -FEM method implementation of H. Hakula.