

Quasiconformal groups

Vladimir Marković

Yau Mathematics Sciences Center, Tsinghua University, China
e-mail: vlad.markovic.work@gmail.com
ORCID: 0000-0002-2781-3058

Abstract. In this talk, I will survey the theory of quasiconformal and convergence groups whose study began with the work of Gehring and Martin. I will focus on explaining why quasiconformal group actions are rigid on low dimensional spheres. The analogous problem for convergence groups is open and is closely related with the Hyperbolization theorem for 3-manifolds.

Keywords: quasiconformal; quasisymmetric; Beltrami equation; hyperbolization theorem; Cannon conjecture.

References

- [1] **F. Gehring, G. Martin.** Discrete quasiconformal groups. *Proc. London Math. Soc.*, 1987, 55, 331–358.
- [2] **V. Marković.** Quasisymmetric groups. *Journal of American Mathematical Society*, 2006, No. 3, 673–715.
- [3] **P. Tukia.** On two-dimensional quasiconformal groups. *Ann. Acad. Sci. Fenn.*, Ser. A I Math., 1980, No. 1, 73–78.