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Quasiconformal and HQC mappings between Lyapunov Jordan domains

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Abstract. Let *h* be a quasiconformal (qc) mapping of the unit disk \mathbb{U} onto a Lyapunov domain. We show that *h* maps subdomains of Lyapunov type of \mathbb{U} , which touch the boundary of \mathbb{U} , onto domains of similar type. In particular if *h* is a harmonic qc (hqc) mapping of \mathbb{U} onto a Lyapunov domain, using it, we prove that *h* is co-Lipschitz (co-Lip) on \mathbb{U} . This settles an open intriguing problem.

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