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Harmonic mappings and distance function

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Abstract. We prove the following theorem: every quasiconformal harmonic mapping between two plane domains with $C^{1,\alpha}$ ($\alpha < 1$) and, respectively, $C^{1,1}$ compact boundary is bi-Lipschitz. This theorem extends a similar result of the author [10] for Jordan domains, where stronger boundary conditions for the image domain were needed. The proof uses distance function from the boundary of the image domain.

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