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Conformal Mapping of Parabola-Shaped Domains

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Abstract. By a parabola-shaped domain we mean a planar domain lying between the curves $y = x^\alpha$ and $y = -x^\alpha$, the case $\alpha = 1/2$ corresponding to the standard parabola. We obtain asymptotic estimates for conformal mappings of such domains onto standard regions, and for the derivatives of such maps.

Keywords. Conformal mapping, distortion, Dini-smooth domain.

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