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8. Analysis

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Boundary Behavior of Conformal Mappings Associated with Singular Measures

It is well known that the derivative of a conformal map onto a rectifiably bounded Jordan domain is in H1. It is also well known by explicit constructions (the domains not of Smirnov Type) that there may be a continuous singular measure determining the inner factor. These results are extended to the case where the domain may have inaccessible boundary points (and the prime end topology must be used). A corresponding factorisation involving singular measures, or in some cases distributions, is given.