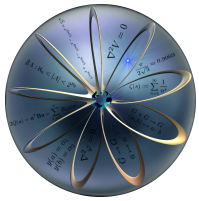

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free analytic boundary arc

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Definition. Let $G \subset \mathbb{C}$ be a region and let γ be a connected subset of ∂G (boundary of G), then γ is a *free analytic boundary arc* of G if for every point $\zeta \in \gamma$ there is a neighbourhood U of ζ and a conformal equivalence $h\colon \mathbb{D} \to U$ (where $\mathbb{D}$ is the unit disc) such that $h(0) = \zeta$, $h(-1, 1) = \gamma \cap U$ and $h(\mathbb{D}_+) = G \cap U$ (where $\mathbb{D}_+$ is all the points in the unit disc with non-negative imaginary part).

References

[1] John B. Conway. . Springer-Verlag, New York, New York, 1995.