
Joan J. Carmona and Christian Pommerenke

Decomposition of Continua and Prime Ends

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Abstract. Let f map the unit disk onto a simply connected domain G . In this paper we consider decompositions of the form $\partial G = C_1 \cup \dots \cup C_m$, in particular the case where C_j are continua and we investigate inclusions between the cluster sets $I(f, \zeta)$, $I^\pm(f, \zeta)$, $\Pi(f, \zeta)$ and the given sets C_j . In this context the concept of a indecomposable continuum appears in a natural way.

Keywords. Conformal maps, indecomposable continua, prime ends, separation by a continuum.

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