

Guadalupe, José J.; Rezola, M. Luisa**The conjugate function in plane curves.** (English) Zbl 0615.46051

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Let $\Gamma = \partial\Omega$ be a rectifiable Jordan curve and let ϕ be the normalized conformal mapping from the unit disc D onto Ω . In this paper the conjugate function operator on Γ is defined in a natural way and the following result is obtained: "The curves such that $\log |\phi'|$ belongs to the closure of L^∞ in BMO are exactly those for which the boundedness of the conjugate function operator is equivalent to the fact that $w \in A_p(\Gamma)''$. The quasiregular curves are examples of such curves.

MSC:**46J15** Banach algebras of differentiable or analytic functions, H^p -spaces**30C20** Conformal mappings of special domains**Keywords:**

rectifiable Jordan curve; normalized conformal mapping; BMO; boundedness of the conjugate function operator; quasiregular curves

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