

A uniqueness theorem for linear elliptic equations with dominating derivative with respect to z

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Abstract

© 2016, Pleiades Publishing, Ltd. The interior uniqueness theorem for analytic functions was generalized by M.B. Balk to the case of polyanalytic functions of order n . He proved that, if the zeros of a polyanalytic function have an accumulation point of order n , then this function is identically zero. M.F. Zuev generalized this result to the case of metaanalytic functions. In this paper, we generalize the interior uniqueness theorem to solutions of linear homogeneous elliptic differential equations of order n with analytic coefficients whose senior derivative is the n -th power of the Cauchy-Riemann operator.

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Keywords

Elliptic equation, the uniqueness theorem