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REFINED MEASURES OF GROWTH OF HARMONIC FUNCTIONS IN \mathbb{R}^4

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Abstract

The paper deals with the study of refined measures of growth of harmonic functions H in \mathbb{R}^4 using the concept of proximate order and LaPlacian type integral operator (and inverse). Moreover, we have characterized the generalized type of H in terms of spherical harmonic coefficients occurring in spherical harmonic expansions. Our results refined the results studied by Kumar [14].

Key Words and Phrases: Proximate order, Spherical harmonic coefficients, Integral transform, Generalized type, Analytic function associate and harmonic functions in \mathbb{R}^4 .

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