

ON THE GENERALIZED WRIGHT FUNCTION

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Dedicated to the 60th birthday of Prof. F. Mainardi

Abstract

The paper is devoted to the study of the generalized Wright function. Conditions for the existence of ${}_p\Psi_q(z)$ are proved. The representations of the function in terms of the Mellin-Barnes integral and of the H -function are established. Special cases, involving the Mittag-Leffler function and its generalizations, are considered. The obtained results imply more precisely the known results.

Mathematics Subject Classification: 33E12, 33C60

Key Words and Phrases: Wright and generalized Wright functions, H -function, Mittag-Leffler-type functions