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Distribution of Zeros of the Mittag-Leffler Function JOHN W. HANNEKEN, DAVID M. VAUGHT, B.N. NARAHARI ACHAR, University of Memphis — The Mittag-Leffler function, which is a generalization of the exponential function, occurs naturally in the solution of physical problems involving fractional differential equations. The zeros of the Mittag-Leffler functions play a significant role in the dynamics solutions. Complete and correct information about the distribution of zeros has not yet been available. A systematic analysis of the zeros of $E_{\alpha,\alpha}(z)$ has been carried out and an iteration formula for the number of zeros for arbitrary alpha has been obtained.

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