

On the Fractional Integration of Generalized Mittag-Leffler Type Functions

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Abstract : In this paper, the generalized fractional integral operators of two generalized Mittag-Leffler type functions are investigated. The special cases of interest involve the generalized M-series and K-function, both introduced by Sharma. The two pairs of theorems established herein generalize recent results about left- and right-sided generalized fractional integration operators applied here to the M-series and the K-function. The note also results in important applications in physics and mathematical engineering.

Keywords : Fox-Wright Psi function, generalized hypergeometric function, generalized Riemann- Liouville and Erdélyi-Kober fractional integral operators, Saigo's generalized fractional calculus, Sharma's M-series and K-function

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