

**A STUDY OF INTEGRAL TRANSFORMS UNIFIED
WITH WHITTAKER AND GENERALIZED
HYPERGEOMETRIC FUNCTIONS**

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Abstract: Integral transforms play a pivotal role in mathematical analysis and have become a central tool in the study of special functions. Motivated by their broad applicability, researchers have continually introduced new forms of these transforms. In this paper, we explore a novel integral transform involving the product of the Whittaker function $W_{k,m}(z)$ and a generalized hypergeometric function. The resulting integral is expressed in terms of the Srivastava triple hypergeometric function. Furthermore, several noteworthy special cases of the proposed integral transform are derived, highlighting its potential for broader applications in mathematical and applied contexts.

Keywords and Phrases: Whittaker function, Hypergeometric function, Srivastava Triple hypergeometric function and Laplace Transform.