



A new extension of Humbert matrix function and their properties

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Abstract:

This paper deals with the study of the composite Humbert matrix function with matrix arguments . The convergence and integral form this function is established. An operational relation between a Humbert matrix function and Kummer matrix function is studied. Also, integral expressions of this relation are deduced. Finally, we define and study of the composite Humbert Kummer matrix functions.

Keywords:

Hypergeometric matrix function, Humbert matrix function, Kummer matrix function, Integral representations.

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