AN EXTENSIVE STUDY ON VARIOUS MULTIVALENTLY ANALYTIC FUNCTIONS WITH COMPLEX COEFFICIENTS AND SOME OF THEIR ARGUMENT PROPERTIES

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Abstract. In the present investigation based on the known assertion proved by Nunokawa [23], various comprehensive results in connection with certain multi-valued analytic functions with complex coefficients are introduced. Further, a number of applications of the main results are obtained.

Keywords: Domains in complex plane; multivalently analytic functions; Taylor-Maclaurin series expansions; ordinary differential operator; fractional order operator; argument properties; differential inequalities

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