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FUZZY DIFFERENTIAL SUBORDINATIONS FOR PRESTARLIKE FUNCTIONS OF COMPLEX ORDER AND SOME APPLICATIONS

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Abstract

In the present paper, we obtain some fuzzy subordination results of prestarlike analytic functions of order $\alpha + i\beta$ in the open unit disk. Also, we give some applications in fractional calculus.

1. Introduction and Preliminaries

Let $L(\lambda)$ denote the class of functions f of the form:

$$f(z) = z + \sum_{n=2}^{\infty} a_n z^{n-\lambda} \quad (0 \le \lambda < 1) \tag{1.1}$$

which are analytic and univalent in the open unit disk $U = \{z \in \mathbb{C} : |z| < 1\}$. Write $L = L(0)$.

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