
INCLUSION PROPERTIES FOR SPIRALLIKE FUNCTION FAMILIES RELATED TO THE ERROR FUNCTION

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ABSTRACT

This paper explores new families of spirallike functions defined through the concepts of subordination and the Error function of the form

$$\mathcal{E}_r f(z) = \frac{\sqrt{\pi z}}{2} \operatorname{er} f(\sqrt{z}) = z + \sum_{n=2}^{\infty} \frac{(-1)^{n-1}}{(2n-1)(n-1)!} z^n.$$

We provide convolution properties, and coefficient bounds for functions within these families and examine their inclusion relations with other well-known classes of analytic functions.

Keywords Analytic function · Spirallike function · Error function · Convolution · Subordination

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