

SUBCLASSES OF MEROMORPHICALLY UNIVALENT FUNCTIONS ASSOCIATED WITH A DIFFERENTIAL OPERATOR

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Abstract

In this paper authors introduced two new subclasses $\Sigma_{\sigma\tau\zeta\xi mp}(\alpha, \beta, \eta)$ and $\Sigma_{\sigma\tau\zeta\xi mp}^+(\alpha, \beta, \eta)$ of meromorphically univalent functions which are defined by means of a new differential operator. By making use of the principle of differential subordination, authors investigated several inclusion relationships and properties of certain subclasses which are defined here by means of a differential operator. Some results connected to subordination properties, coefficient estimates, convolution properties, integral representation, distortion theorems are obtained. We also extend the familiar concept of (n, δ) neighborhoods of analytic functions to these subclasses of meromorphically univalent functions.

Key Words and Phrases : *Analytic functions, Meromorphic functions, Univalent functions, Differential operator, Subordination, Neighborhoods and Convolution.*

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