

## SOME PROPERTIES OF CERTAIN CLASS OF MEROMORPHIC FUNCTIONS DEFINED BY LINEAR OPERATOR

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**Abstract.** Making use of certain linear operator, we define a new subclass of meromorphically uniformly convex functions with positive coefficients and obtain coefficient estimates, growth and distortion theorems, extreme points, closure theorems and radius of starlikeness and convexity for the new subclass  $\Sigma_w^*(\alpha, \beta, k)$ .

### 1. Introduction

Let  $A$  denote the class of all functions  $f$  of the form

$$f(z) = z + \sum_{n=2}^{\infty} a_n z^n \quad (1.1)$$

in the open unit disc  $U = \{z \in \mathcal{C} : |z| < 1\}$ . Let  $S$  be the subclass of  $A$  consisting of univalent functions and satisfy the following usual normalization condition  $f(0) = f'(0) - 1 = 0$ . We denote by  $S$  the subclass of  $A$  consisting of functions  $f$  which are all univalent in  $U$ . A function  $f \in A$  is a starlike function by the order  $\alpha, 0 \leq \alpha < 1$ , if it satisfy

$$Re \left\{ \frac{zf'(z)}{f(z)} \right\} > \alpha, z \in U. \quad (1.2)$$

We denote this class with  $S^*(\alpha)$ .

A function  $f \in A$  is a convex function by the order  $\alpha, 0 \leq \alpha < 1$ , if it satisfy

$$Re \left\{ 1 + \frac{zf''(z)}{f'(z)} \right\} > \alpha, z \in U. \quad (1.3)$$

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