



Volume 4, Issue 4, Article 64

## Neighbourhoods and Partial Sums of Starlike Functions Based on Ruscheweyh Derivatives

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**Keywords:** Univalent, Starlike, Convex.

**Date Received:** 14/11/02

**Date Accepted:** 26/03/03

**Subject Codes:** 30C45

**Editors:** [Alexandru Lupas \(1942-2007\)](#),

**Abstract:** In this paper a new class  $S_p^\lambda(\alpha, \beta)$  of starlike functions is introduced. A subclass  $TS_p^\lambda(\alpha, \beta)$  of  $S_p^\lambda(\alpha, \beta)$  with negative coefficients is also considered. These classes are based on Ruscheweyh derivatives. Certain neighbourhood results are obtained. Partial sums  $f_n(z)$  of functions  $f(z)$  in these classes are considered and sharp lower bounds for the ratios of real part of  $f(z)$  to  $f_n(z)$  and  $f'(z)$  to  $f'_n(z)$  are determined.



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