

OPEN PROBLEM FOR GENERAL CLASS OF SUPERORDINATION-PRESERVING CONVEX INTEGRAL OPERATOR

(Masalah Terbuka untuk Kelas Umum Pengoperasi Kamiran Cembung yang
Mengawet Superordinasi)

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ABSTRACT

Let $H(U)$ be the space of analytic functions in the unit disc U . For the integral operator $A_{\alpha,\beta,\gamma}^{\phi,\varphi}[f](z): K \rightarrow H(U)$ with $K \subset H(U)$, we will determine sufficient conditions on certain parameters $\alpha, \beta, \gamma, \delta$ for *sandwich-type theorem*. We will also give some particular cases of the main result obtained for appropriate choices of function h , that also generalises classical results of the theory of differential subordination and superordination.

Keywords: Analytic function; starlike and convex function; differential operator; differential subordination

ABSTRAK

Misalkan $H(U)$ suatu ruang fungsi analisis dalam cakera unit U . Diberi pengoperasi kamiran $A_{\alpha,\beta,\gamma}^{\phi,\varphi}[f](z): K \rightarrow H(U)$, dengan $K \subset H(U)$, akan ditentukan syarat cukup bagi beberapa parameter $\alpha, \beta, \gamma, \delta$ untuk *teorem jenis-sandwic*. Seterusnya, akan diberi kes-kes penting bagi hasil utama yang diperoleh untuk menentukan pilihan bagi fungsi h , dan juga hasil teori klasik subordinasi dan superordinasi pembeza yang mengitlak.

Kata kunci: Fungsi analisis; fungsi bak bintang dan cembung; pengoperasi pembeza; subordinasi pembeza

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