

NEW RESULTS RELATED TO THE CONVEXITY OF THE BERNARDI INTEGRAL OPERATOR

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Abstract. In this paper we prove the convexity of the image of a close-to-convex function by the Bernardi integral operator given by

$$L_\gamma(f)(z) = F(z) = \frac{\gamma+1}{z^\gamma} \int_0^z f(t)t^{\gamma-1} dt, \quad z \in U. \quad (1)$$

This result extends the result obtained by N. Pascu in [9], where it has been shown that the Bernardi operator transforms a close-to-convex function into a close-to-convex function under certain conditions.

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