Univalence conditions and properties of a new general integral operator

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ABSTRACT.

In this paper, we obtain univalence conditions and the order of convexity of a new general integral operator defined on the space of normalized analytic functions in the open unit disk $U$. Also, we give some other properties on the class $N(\varphi)$. Results presented in this paper may motivate further research in this fascinating field.

REFERENCES

[1] Alexander, J. W., Functions which maps the interior of the unit circle upon simple regions, Ann. of Math., 17 (1915), 12–22

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