

A NOTE ON GAUSSIAN INTEGRAL MEANS OF ENTIRE FUNCTIONS

HAIYING LI AND YANGYANG WANG

Abstract. In this paper, we investigate the convexity of function $r \mapsto \ln M_{2,1}(f(z), r)$ in $\ln r$ on $(0, \infty)$, where $f(z) = z^3 + C$.

Mathematics subject classification (2010): 30H10, 30H20.

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REFERENCES

- [1] C. WANG, J. XIAO, *Gaussian integral means of entire functions*, Complex. Anal. Oper. Theory, **8**(2014), 1487–1505.
- [2] H. LI, T. LIU, *Convexities of Gaussian integral means and weighted integral means for analytic functions*, Czechoslovak Math. J., **69**(2019), 525–543.
- [3] K. ZHU, *Analysis on Fock spaces*, Springer, New York, 2012.
- [4] O. CONSTANTIN, *A Volterra-type intergration operator on Fock spaces*, Proc. Amer. Math. Soc., **140**(2012), 4247–4257.
- [5] C. WANG, K. ZHU, *Logarithmic convexity of area integral means for analytic functions*, Math. Scand., **114**(2014), 149–160.
- [6] P. DUREN, *Theory of H^p Space*, Academic Press, 1970.
- [7] C. WANG, J. XIAO, *Addendum to "Gaussian integral means of entire functions"*, Complex. Anal. Oper. Theory, **10**(2016), 495–503.
- [8] C. WANG, J. XIAO, K. ZHU, *Logarithmic convexity of area integral means for analytic functions II*, J. Aust. Math. Soc., **98**(2015), 117–128.