

Pointwise multipliers for Hardy-Sobolev spaces

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Our focus of interest comes out from the following fact in \mathbb{R}^n : for a nonlinear potential of a positive measure, it is enough to impose its boundedness to assure that the potential is a pointwise multiplier of the Bessel space . We will check, using different methods, an analogous result for non isotropic holomorphic potentials on the unit ball in \mathbb{C}^n , showing that the bounded holomorphic potentials are pointwise multipliers for the Hardy-Sobolev spaces. As a consequence, we construct nontrivial examples of such multipliers and we give some applications.

References

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- [2] Cascante, C.; Fbrega, J.; Ortega, J. M. Holomorphic potentials and multipliers for Hardy-Sobolev spaces *Monatsh. Math.*, **177**, 185-201, 2015.