DUALITY OF GENERALIZED HARDY AND BMO SPACES ASSOCIATED WITH SINGULAR PARTIAL DIFFERENTIAL OPERATOR

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Abstract. First we define and study the generalized bounded mean ossilation space $\mathfrak{B}mo_\alpha$ associated with the Riemann-Liouville operator $\mathscr{R}_\alpha$. Next we prove the duality between $\mathfrak{B}mo_\alpha$ and the genralized Hardy space $\mathcal{H}^1_\alpha$ associated with $\mathscr{R}_\alpha$.

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