

An improvement of Hölder's inequality with r -conjugate exponents relative to L_p -norm

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Abstract

This paper investigates the Hölder's inequality under the condition r -conjugate exponents in the sense that $[?]1/p_k=1/r$. Successively, we have, under r -conjugate exponents relative to the L_p -norm, investigated generalized Hölder's inequality, the interpolation of Hölder's inequality, and generalized s -order Hölder's inequality which is an expansion of the known Hölder's inequality.

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