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ON A HILBERT-TYPE INTEGRAL INEQUALITY IN THE SUBINTERVAL AND ITS OPERATOR EXPRESSION

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ABSTRACT. In this paper, by using the methods of real analysis and functional analysis, a Hilbert-type integral inequality in the subinterval (a, ∞) ($a > 0$) with the homogeneous kernel of $-\lambda$ -degree and a best constant factor and its operator expression are given. As applications, a few improved results, the equivalent forms and some new inequalities with the particular kernels are obtained.

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