

## ON A NEW DISCRETE HILBERT-TYPE INEQUALITY AND ITS APPLICATIONS

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*Abstract.* In this paper, a theorem related to the Hilbert-type inequality is corrected. By introducing parameters, and using Euler-Maclaurin summation formula, we give a discrete form of the Hilbert-type inequality involving a non-homogeneous kernel. Furthermore, we prove that our result is a concise generalization of the corrected theorem and some known results. As applications, some particular new results are presented.

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