

A CLASS OF EXPONENTIAL INEQUALITIES

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Abstract. We prove that for reals x_i with $\sum x_i \geq 0$, the estimate $\sum x_i e^{x_i} \geq \frac{C_N}{N} \sum x_i^2$ holds, where $C_N = \max\{2, e(1 - 1/N)\}$. We also prove analogues for the 1-norm and for Lebesgue-integrable functions.

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