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INEQUALITIES WITH APPLICATIONS INVOLVING k–BETA RANDOM VARIABLE

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Abstract. In this paper, we introduce some properties of beta k-distribution defined in [1]. We present some inequalities involving beta k-distribution via some classical inequalities, like Chebyshev's inequality for synchronous (asynchronous) mappings and Holder's inequality. Also, we discuss the inequalities for harmonic mean, variance and coefficient of variation of β_k random variable involving the parameter $k > 0$. If $k = 1$, we get the classical results.

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