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A probabilistic proof of the Lindeberg-Feller central limit theorem.

Am. Math. Mon. 116, No. 1, 45-60 (2009).

The author presents a simple and easily interpretable probabilistic formulation of the Lindeberg condition and demonstrates its sufficiency and partial necessity in the Central Limit Theorem (CTL) using elementary means. The proof is based on the so-called zero bias transformation, which is motivated by Stein's characterization of the mean zero normal distribution with variance σ^2 . *Wiesław Dziubdziela (Kielce)*

Classification: K55

Keywords: Lindeberg-Feller central limit theorem; probabilistic proof; Stein's characterization of normal distribution; zero bias transformation

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