

1035-Z1-1829      **Larry Wayne Lewis\*** (l1ewis@spalding.edu), Spalding University, 851 S. 4th Street, ADM  
117, Louisville, KY 40203. *Chebyshev's Inequality for Fuzzy Random Variables.*

Classical statistics resides at the kernel of a more general fuzzy statistics. This fuzzy statistics which is both useful and mathematically rigorous includes, not precludes, existing classical statistical theory. Such a fuzzy statistics exists in theory and in practice; and, traditional theorems of classical discourse possess theoretical analogs where fuzzy number data (and, therefore real number data, since the set of real numbers is a proper subset of the set of fuzzy numbers) are permitted. The classical Chebyshev's Inequality can be generalized to include fuzzy random variables that permit fuzzy number members. (Received September 20, 2007)