Properties of Conformable Fractional Arcsine Probability Distribution

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Abstract

This thesis looks at the conformable fractional isotopes coupled with some of its basic concepts linked to the probability distribution of random variables that involves the study of the density, cumulative distribution, survival, and hazard function. Furthermore, it introduces conformable fractional isotopes with the expected values, which include the r^{th}_moments, mean, variance, skewness, and kurtosis. As well, it introduces conformable fractional isotopes with measures of entropy such as Shannon, Renyi, and Tsallis coupled with the characteristic function.

Keywords: Entropy, conformable distribution, Arcsine distribution, probability measures.