

CONFORMABLE FRACTIONAL APPROXIMATION OF CSISZAR'S *f*-DIVERGENCE

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ABSTRACT. Here are given tight probabilistic inequalities that give nearly best estimates for the Csiszar's *f*-divergence. These use the right and left conformable fractional derivatives of the directing function *f*. Csiszar's *f*-divergence or the so called Csiszar's discrimination is used as a measure of dependence between two random variables which is a very important aspect of stochastics, we apply our results there. The Csiszar's discrimination is the most essential and general measure for the comparison between two probability measures.

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