



A COMPARATIVE STUDY OF SOME TIME-FREQUENCY DISTRIBUTIONS USING RENYI CRITERION (WedAmOR1)

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★ Abstract :

The paper presents a quantitative comparison study of some time-frequency distributions i.e. (TFDs). The comparison is in terms of a criterion known as the Renyi measure. The assessment of the TFDs is accomplished by evaluating the Rényi measure which yields the best time-frequency resolution. We show, using synthetic as well as real-life data, that a recently proposed TFD outperforms existing TFDs. In particular, we show that this proposed TFD presents a high time-frequency resolution while suppressing the undesirable cross-terms.