

Tsallis entropy measure of noise-aided information transmission in a binary channel

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R�sum� en anglais	Noise-aided information transmission via stochastic resonance is shown and analyzed in a binary channel by means of information measures based on the Tsallis entropy. The analysis extends the classic reference of binary information transmission based on the Shannon entropy, and also parallels a recent study based on the R�nyi entropy. The conditions for a maximally pronounced stochastic resonance identify optimal Tsallis measures. The study involves a correspondence between Tsallis and R�nyi information measures, specially relevant to the characterization of stochastic resonance, and establishing that for such effects identical properties are shared in common by both Tsallis and R�nyi measures.
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Liens

[1] <http://okina.univ-angers.fr/f.chapeau/publications>

[2] [http://okina.univ-angers.fr/publications?f\[author\]=1971](http://okina.univ-angers.fr/publications?f[author]=1971)

[3] [http://okina.univ-angers.fr/publications?f\[author\]=1901](http://okina.univ-angers.fr/publications?f[author]=1901)

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