Comment: Nonlinear SNR Amplification Of Harmonic Signal In Noise

Abuelma'atti, M.T.; King Fahd Univ. of Pet. & Minerals, Dhahran, Saudi Arabia;
Electronics Letters; Publication Date: 19 Jan. 2006; Vol: 42, Issue: 2
King Fahd University of Petroleum & Minerals
http://www.kfupm.edu.sa

Summary

This comment relates to a recently published Letter, which computes the signal-to-noise ratio (SNR) of a harmonic signal in additive noise after transformation by an arbitrary memoryless nonlinearity. According to the authors, with a simple saturating nonlinearity having direct electronic implementation, an amplification of the SNR can be obtained. It is shown here that this computation and the resulting conclusion are not new.

For pre-prints please write to: abstracts@kfupm.edu.sa