

New Superimposed Coded and Uncoded Schemes for Transmission of a Gaussian Source over a Gaussian Channel

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Problem: Point-to-point transmission of a Gaussian source over an AWGN channel. Digital/analog/hybrid achieve optimum distortion.

Main Result: By using the dirty-paper aux. codeword T^n , a range of γ at the dirty-paper encoder instead of only Costa's optimal $\gamma = \frac{P}{P+N}$ can achieve optimum.

