



Performance Analysis of Decode-and-Forward Relaying in Gamma-Gamma Fading Channels

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Decode-and-forward (DF) cooperative communication based on free space optical (FSO) links is studied in this letter. We analyze performance of the DF protocol in the FSO links following the Gamma-Gamma distribution. The cumulative distribution function (CDF) and probability density function (PDF) of a random variable containing mixture of the Gamma- Gamma and Gaussian random variables is derived. By using the derived CDF and PDF, average bit error rate of the DF relaying is obtained.

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