

A Tight Bound On The Error Probability Of Space-Time Codes Forrapid Fading Channels

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Summary

This paper presents the performance of space-time (ST) codes over rapid fading channels. A tight upper bound on the pairwise error probability (PWE) of ST codes over rapid fading channels is derived. Also, an upper bound on the bit error probability (BEP) is evaluated using the derived PWE. The existing and new bounds are evaluated for different QPSK ST codes and compared to the simulation results. The new bound is shown to be tighter than the existing bound by almost 2 dBs and is very tight to the simulation results

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