Bit Error Probability Of Bit-Interleaved Coded Modulation (BICM) In Wireless Environments

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Summary

In this paper a union bound on the bit error probability of bit-interleaved coded modulation (BICM) is derived. In the derivation we assume that the bit errors in a codeword are uniformly distributed over the transmitted symbols. We derive the bound for BICM systems over AWGN, Rician and Nakagami fading channels. The proposed bound is general to any signal constellation and coding scheme with a known distance spectrum

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