Abstract

The analysis of bit error rate (BER) is carried over independent identically distributed (i. i. d) Nakagami-m and Rician fading channel using space time transmit diversity (STTD). Error rates for M-PAM and M-QAM with space time transmit diversity (STTD) is obtained by averaging the conditional BER over the probability density function (pdf) of received signal-to-noise ratio (SNR) per bit for independent identically distributed Nakagami-m fading channel. Error performance plots of MPAM and MQAM modulation techniques has been drawn and compared for different values of Rician parameter $K$ and modulation order $M$ for two transmitting and one receiving antenna.

References

Performance Comparison of MPAM and MQAM in Nakagami-m and Rician Fading Channel


Index Terms

Computer Science Communication Systems

Keywords

M-ary pulse amplitude modulation (MPAM) M-ary Quadrature Amplitude modulation (MQAM)

Bit error rate

signal-to

Noise ratio (SNR)

Space time transmit diversity (STTD)