Abstract

A study of space-time block coding in analytical form—multiple input and multiple output (STBC-MIMO) system was done in various cases. Initially, a basic Alamouti scheme for encoding was illustrated. Then, the performance of proposed STBC-MIMO was studied under varying a number of transmitting antennas, varying number of receiving antennas, varying channels, various modulations and also at varying rates. The simulation results were obtained for all cases. At each and every stage, a new encoding matrix was derived.

References


Index Terms

Computer Science

Wireless

Keywords
Space-Time Block Coding (STBC) for Multiple Transmit Antennas over Time Selective Fading Channels

Space-Time Block Coding, OSTBC, Rayleigh fading channel, AWGN, MIMO, BER.