Abstract

One of the most challenging aspects of wireless communication is the wireless channel which is subjected to fading. Fading leads to deterioration of the signal quality at the receiver. Cooperative relaying is considered to be one of the most versatile techniques to overcome fading. In this paper serial, parallel and opportunistic asymmetric cooperative relaying strategies are studied and comparisons are drawn between the different schemes used. In serial relaying data is transmitted in hops while in parallel relaying two or more relaying nodes transmit simultaneously. Opportunistic relaying on the other hand involves selecting one best relay based on predetermined criteria. The BER performance of the schemes are analyzed in detail and the optimal relaying techniques for different SNR conditions are suggested.
References


Index Terms

Computer Science
Networks

Keywords

Cooperative Communications  Cooperative Relaying  Serial Relaying  Parallel Relaying  Opportunistic Relaying.