

Improved Cooperative Communication Scheme in the Edge of Cell Coverage

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Abstract : This paper proposes the new cooperative communication scheme for the wireless communication system. When the receiver is located in the edge of coverage, the signal from the transmitter is distorted by the inter-cell interference (ICI) and power reduction by distance. In order to improve communication performance, the proposed scheme adds the relay. By using the relay, the receiver receives the signal from the transmitter and relay at the same time. Therefore, the new cooperative communication scheme obtains diversity gain and is improved by the relay.

Keywords : cooperative communication, diversity gain, OFDM, MIMO

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