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Coordinated Multi-Point Scheme Based on Channel State Information in MIMO-OFDM System

Authors: Su-Hyun Jung, Chang-Bin Ha, Hyoung-Kyu Song

Abstract : Recently, increasing the quality of experience (QoE) is an important issue. Since performance degradation at cell edge extremely reduces the QoE, several techniques are defined at LTE/LTE-A standard to remove inter-cell interference (ICI). However, the conventional techniques have disadvantage because there is a trade-off between resource allocation and reliable communication. The proposed scheme reduces the ICI more efficiently by using channel state information (CSI) smartly. It is shown that the proposed scheme can reduce the ICI with less resources.

Keywords: adaptive beamforming, CoMP, LTE-A, ICI reduction

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