

Advanced CoMP Scheme for LTE-based V2X System

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Abstract : In this paper, a highly efficient coordinated multiple-point (CoMP) scheme for vehicular communication is proposed. The proposed scheme controls the transmit power and applies proper transmission scheme for the various situations. The proposed CoMP scheme provides comparable performance to the conventional dynamic cell selection (DCS) scheme. Moreover, this scheme provides improved power efficiency compared with the conventional joint transmission (JT) scheme. Simulation results show that the proposed scheme can achieve more enhanced performance with the high power efficiency and improve the cell capacity.

Keywords : CoMP, LTE-A, V2I, V2V, V2X.

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