

异构网络协作通信技术研究

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摘要: 由于异构网络中跨层干扰等问题对 Macrocell 用户的影响, 提出利用协作通信技术削弱其影响的方法, 即通过宏基站和 Femtocell 用户的协作分集来改善 Macrocell 用户下行链路的性能, 同时还基于软切换原理提出了一种中继选择策略. 理论分析和仿真结果表明, 基于 Femtocell 用户的协作通信技术在 Macrocell 用户性能方面明显优于直接传输.

关键词: 异构网络; 协作通信; 下行链路; 中继选择

Research of Cooperative Communication Technology in Heterogeneous Network

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Abstract: Due to the problem of cross-tier interference affects Macrocell users in heterogeneous network, We propose a method that relying on cooperative communication technology to weaken the influence, it is to improve the downlink performance of Macrocell users through MBS and Femtocell users' cooperative diversity, but also a relay selection strategy based on the principle of soft switching is proposed. Theoretical analysis and simulation results show that the cooperative communication technology based on Femtocell users is significantly superior to the direct transmission in terms of the performance of Macrocell users.

Key words: heterogeneous networks; cooperative communication; downlink; relay selection

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