RRM Strategy Based on Throughput and Fairness in LTE-A Relay System

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Abstract— Relay has been one of the most promising techniques towards LTE-A system, which improves cell coverage and throughput in cell edge. For the balance between system throughput and user fairness of LTE-A system with relay, this paper proposes user SINR dispersion degree as the main parameter for resource allocation, significantly improved the fairness of the center users and edge users. Simulation results show that the proposed Balanced Aim allocation algorithm which combined throughput, user fairness and game theory makes the system resource allocation more efficient, improving the overall performance of the system.

Key words— LTE-A; relay; game theory; throughput; user fairness



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