

Application Of Tagged User Approach To Analyze Finite-Users Finite-Buffer Slotted ALOHA System In Flat Fading Capture Channel

Rasool, S.B. Sheikh, A.U.; Telecommun. Res. Laboratory, King Fahd Univ. of Pet. & Miner., Dhahran, Saudi Arabia;

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King Fahd University of Petroleum & Minerals

<http://www.kfupm.edu.sa>

Summary

We study a finite user finite buffer slotted ALOHA multiple access system with acknowledgement delay operating over a Rayleigh fading channel with capture. We extend a new technique, tagged user analysis, to be applicable to such a wireless fading channel and derive all relevant system performance indices. The analysis results are backed by simulations, it is shown that for moderate number of active users, the simulation and analytical results have a very good match.

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