论文

TDD-CDMA系统中一种带缓冲区的动态信道分配算法

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摘要
TDD-CDMA系统的上下行时隙的不对称性可以造成严重的交叉时隙干扰。为了降低交叉时隙的干扰，提出了带缓冲区的动态信道分配算法(PGBDCA)，在把小区分成内部区和外部区的基础上，引入了缓冲区，专门用来处理增益门限值附近用户的时隙分配。使用静态系统仿真的方法对算法进行了仿真，结果表明PGBDCA算法与其他传统的动态信道分配算法比，它可以接入更多的用户，提高系统的性能。同时缓冲区的大小和位置也对系统性能有很大的影响。

关键词　　动态信道分配　交叉时隙干扰　路径增益　缓冲区

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A Dynamic Channel Allocation Based on Path Gain with Buffer for TDD-CDMA System

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Abstract
The TDD-CDMA system with unbalanced slot allocation between uplink (UL) and downlink (DL) will cause the cross-slot interference which may be inferior to system. In order to decrease the interference, a Dynamic Channel Allocation (DCA) based on path gain with buffer (PGBDCA) strategy is proposed. In PGBDCA, the cell is divided into three regions: besides inner and outer region, the PGBDCA introduce the buffer region to manage the slots in which path gain is near to threshold. With static system level simulation, the PGBDCA algorithm shows better performances than conventional algorithms in terms of the probability of the access users. The simulation result also shows the position and size of the buffer are the key factors that will influence on the performance of the system.

Key words　　Dynamic Channel Allocation (DCA)　Cross slot interference　Path gain　Buffer-region

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