具非等值衰落指數之耙式接收機於多載波直序式CDMA系統中之研究

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摘 要

本論文針對二維的(天線差異)多載波直接序列分碼多重接近（multicarrier direct-sequence coded-division multiple-access, MC-DS-CDMA）耙式接收器系統性能的評估，其中系統的工作環境假設處於頻率選擇性衰落（frequency selective fading）方面。而且，一些系統參數，例如可解決的多重路徑數目，耙式接收器的接收數量，能量衰減的參數因子（fading delay factor）多重強度外形（multipath inteasity profile, MIP），以及在天線之間的相關特性，被分別採用來評估其影響。這文章中提出二維的MC-DS-CDMA系統耙式接收機。為了確認假設的準確性，許多數值結果分別討論在這篇文章裡。在本論文研究中，我們主張相關衰落模型除了單一衰落參數支配著MC-DS-CDMA系統的性能之外，而且天線的數量也明確影響著系統性能。

關鍵詞 : 直接序列碼分多工系統 ; 二維耙式接收機 ; 最大比例合成 ; 天線分集

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