無線通訊系統中常用之分集合成技術工作於選頻性衰落環境之研究=The combining diversity techniques frequently applied in ...

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摘 要

本論文旨在討論雙分支最大比例合成(maximum ratio combining，MRC)分集系統工作於相關性分支間強度，且具有相關性Nakagami-m衰落特性(此能量模型與相關性gamma分布相似)中通道容量的評估。基於近似通道容量性能分析，本文提供機率密度函數(probability density function，pdf) 的公式。在本論文中提及的Gamme變數之總和，是基於Moschopoulos個別Gamme級數的表示。Nakagami-m衰落在特殊情況下，可以得到Rayleigh衰落相應的表達模式。最後，在這篇論文中，得到的通道容量方程式，透過數值分析方法，實例說明和確認的目的，在推導得知的通道容量公式後，於結論中亦與特例比較呼應。

關鍵詞 : MRC分集，通道容量，Gamma變數，Nakagami-m衰落

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