

## 时变信道下基于有效容量的OFDMA系统资源分配方案

刘蓓 邱玲\*\*

中国科学技术大学个人通信与扩频实验室 合肥 230027

### Effective Capacity Based Resource Allocation Scheme in OFDMA for Time-varying Channels

Liu Bei Qiu Ling\*

Personal Communication Network and Spread Spectrum Laboratory, University of Science and Technology of China, Hefei 230027, China

摘要

参考文献

相关文章

Download: PDF (300KB) [HTML](#) 1KB Export: BibTeX or EndNote (RIS) [Supporting Info](#)

**摘要** 该文给出时变信道下多用户正交频分多址接入(OFDMA)系统的有效容量表达式。为了最大化系统平均有效容量,该文利用泰勒近似得到了渐近可达的多用户调度准则,根据用户移动速度、业务时延敏感特性和有效容量的关系调度用户。仿真结果表明,该方案能够更好地提高移动用户有效容量。

**关键词:** 无线通信 服务质量(QoS) 有效容量 时变信道 资源分配

**Abstract:** The effective capacity of the multi-user OFDMA (Orthogonal Frequency-Division Multiple Access) system for time-varying channel is characterized. Then to maximize the system average effective capacity, through the Taylor approximation, an asymptotical optimal user scheduling is proposed, which selects users based on the relationships among the moving speed, traffic profile and the effective capacity. By means of simulations, it is further shown that the proposed scheme can improve the effective capacity of the mobile hosts.

**Keywords:** Wireless communication Quality of Service (QoS) Effective capacity Time-varying channel Resource allocation

Received 2010-12-23;

**通讯作者:** 邱玲 Email: lqiu@ustc.edu.cn

**引用本文:**

刘蓓 邱玲.时变信道下基于有效容量的OFDMA系统资源分配方案[J] 电子与信息学报, 2011,V33(10): 2312-2316

Liu Bei Qiu Ling.Effective Capacity Based Resource Allocation Scheme in OFDMA for Time-varying Channels[J] , 2011,V33(10): 2312-2316

**链接本文:**

<http://jeit.ie.ac.cn/CN/10.3724/SP.J.1146.2010.01409> 或 <http://jeit.ie.ac.cn/CN/Y2011/V33/I10/2312>

#### Service

- ▶ [把本文推荐给朋友](#)
- ▶ [加入我的书架](#)
- ▶ [加入引用管理器](#)
- ▶ [Email Alert](#)
- ▶ [RSS](#)

#### 作者相关文章

- ▶ [刘蓓 邱玲](#)
- ▶ [Qiu-Ling](#)
- ▶ [Qiu, L.](#)
- ▶ [Qiu-Ling](#)
- ▶ [Qiu](#)