

论文

## 一种考虑无线链路突发差错的TCP流量新解析模型

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摘要

该文提出新的TCP流量理论分析模型,研究无线链路突发差错引起的分组丢失对TCP流量性能的影响。理论分析及数值仿真结果表明,该解析模型是合理的,既有较准确的分析结果,又降低了复杂度。同时,还表明在慢衰落信道中相关性越强,TCP流量越大,独立同分布信道的TCP流量是下界,即物理信道相关性对TCP流量是有利的。

关键词 [无线链路突发差错](#) [TCP流量](#) [半Markov模型](#)

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### A new analytical model for the tcp throughput with bursty errors in wireless links

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Abstract

A new analytical model for the TCP throughput, considering the packet losses caused by high and bursty errors in wireless links, is proposed. The analysis and numerical simulation prove that this model is exact and simple. And it is shown that channel correlations can result in better performance of TCP over slow fading channels, and the TCP throughput in i.i.d channel is the lower bound.

Key words [Bursty errors in wireless links](#) [TCP throughput](#) [Semi-Markov model](#)

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