

Study of the physical layer in the radio interface of third-generation mobile communication networks - UMTS

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Abstract: In the increasingly prevalent context of mobile services, research on the physical layer in the UMTS network radio interface has become essential. This topic aims to analyze and optimize data transmission performance on UMTS by applying physical principles. Using a combination of theoretical and experimental methods, the topic will explore technical challenges and propose solutions to improve service quality. The expected outcome is an optimized system, contributing to enhancing the service capability of the UMTS mobile network.

Keywords: Radio physics, UMTS, Data transmission, Performance optimization, Mobile services