

Machine Learning Aided Acquisition, Feedback and Utilization of Channel State Information for Wireless Communication

Dissertation

zur Erlangung des akademischen Grades

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Preface

The presented dissertation emerged from my work as a researcher with the Department of Communications Engineering at the University of Bremen. First and foremost I would like to thank Armin Dekorsy for offering me the opportunity to pursue my doctoral degree at the Department of Communications Engineering. His continuous support and professional guidance enabled and encouraged me to successfully publish my results in numerous international conferences as well as to discuss and exchange ideas among peers to grow my scientific expertise as well as to grow personally.

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Johannes Demel

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Chapter 1

Introduction

Index entries can be defined like shown here in the source code and glossary entries are simply used per multiple input multiple output (MIMO).

1.1 Structure

1.2 Notation

Chapter 2

Learning Based Channel Estimation for OFDM systems

2.1 Overview

2.2 Chapter Summary

Chapter 3

Quantization and Compression for Channel State Information

3.1 Overview

3.2 Chapter Summary

This Fig. 3.1 is an example of a TikZ plot.

Finally, Fig. ?? is a simple TikZ picture. However, keep in mind that the math labels are taken from your definition file. You want to stay in sync.

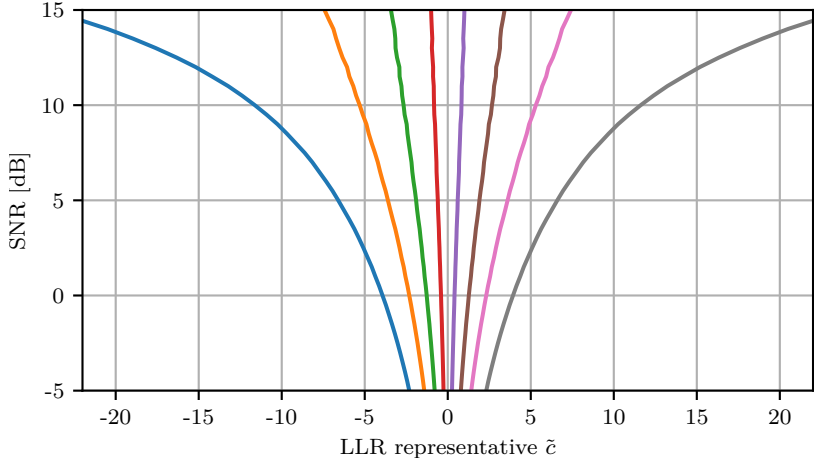


Figure 3.1: Signal-to-Noise-Ratio (SNR) dependent quantizer Log-Likelihood Ratio (LLR) representatives for $\Re\{\cdot\} / \Im\{\cdot\}$ Quadrature Phase Shift Keying (QPSK) components with $I_q = 8$, $N_Q = 1024$.

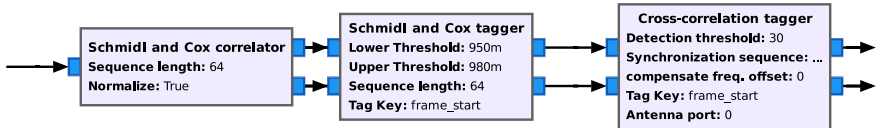


Figure 3.2: Internals of the *XFDM Sync Multicarrier Sync* hierarchical flowgraph.

Chapter 4

Link Adaptation Algorithms and Enhanced Techniques Based on SINR Sequence Prediction

4.1 Overview

4.2 Chapter Summary

Chapter 5

Summary

Appendix A

First Appendix

