

Modeling a MIMO-OFDM Wireless System

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Wireless Communications
ECE-408 — Spring 2020

Abstract—

Index Terms—MIMO, OFDM, pre-coding, zero-forcing, MMSE, IEEE802.11a

I. INTRODUCTION

II. MIMO

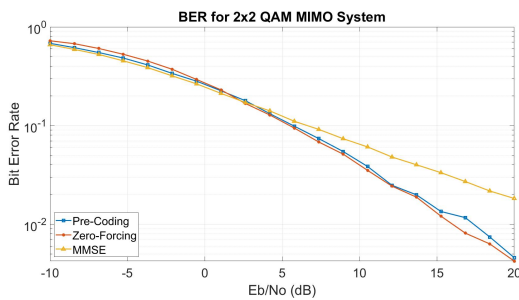


Fig. 1. BER plot for a 2×2 QAM MIMO system using different MIMO algorithms.

III. OFDM

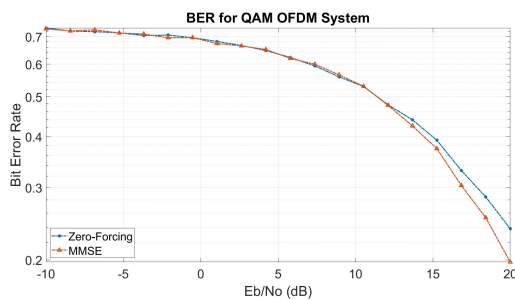


Fig. 2. BER plot for a QAM OFDM system using different OFDM algorithms.

IV. MIMO-OFDM

V. CONCLUSION

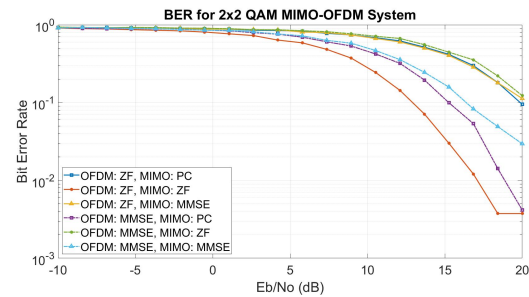


Fig. 3. BER plot for a 2×2 QAM hybrid MIMO-OFDM system using all combinations of the previous MIMO and OFDM algorithms.