

ECE 630: Statistical Communication Theory
Prof. B.-P. Paris
Homework 10
Due: April 30, 2019

Reading Madhow: Section 3.4 through 3.6.

Problems

1. Madhow: Problem 3.12

Note, the notation used in part (a) is not very obvious. R is the radius of the 8-PSK constellation. $d_{\min}^{(1)}$ is the distance between nearest neighbors in the constellation labeled QAM1. $d_{\min}^{(2)}$ is the distance between nearest neighbors in the constellation labeled QAM2.

2. Madhow: Problem 3.13
3. Madhow: Problem 3.16
4. Madhow: Problem 3.17