

# EE477 Homework 5

Aydın Uzun  
2015401210

## I. CHANNEL I

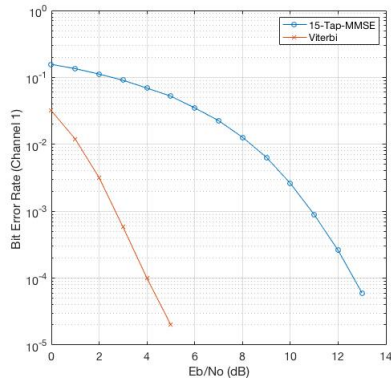


Fig. 1: channel 1 semi-logarithmic BER vs  $E_b/N_0$

It is obvious that Viterbi Algorithm has better results. On the other hand, computational complexity of Viterbi Algorithm is such high that it is not efficient to use in practical applications of some channels. Whereas MMSE equalizer does not have this computational complexity and gives applicable BER performance depending on the noise and the performance you want to achieve.

## II. CHANNEL II

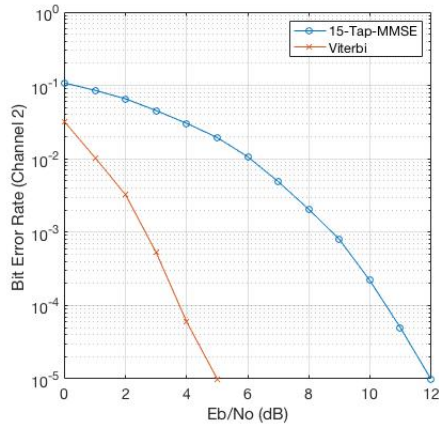


Fig. 2: channel 2 semi-logarithmic BER vs  $E_b/N_0$

## III. CHANNEL III

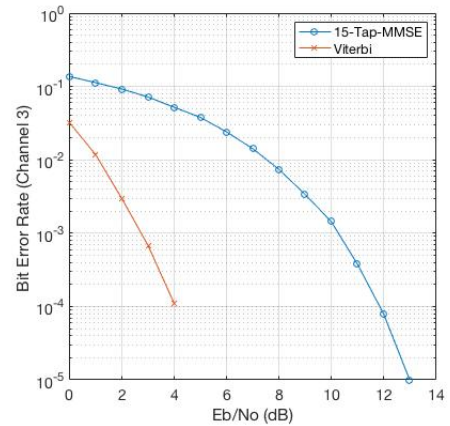


Fig. 3: channel 3 semi-logarithmic BER vs  $E_b/N_0$