

Figure 4: Channel capacity estimation for Rayleigh fading channel

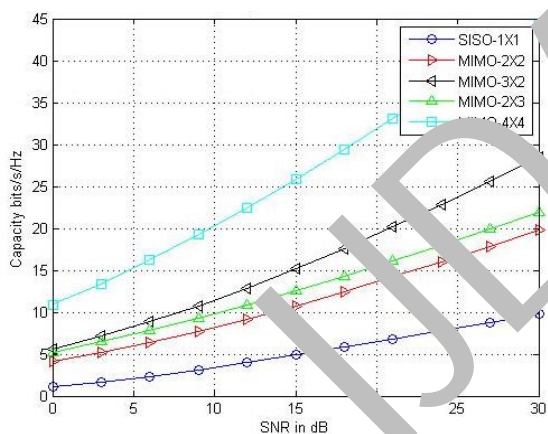


Figure 5: Channel capacity estimation for Rician channel

The above simulated results depicted shows the channel capacity v/s SNR where the capacity increases according to increase of transmit diversity, as antenna size is 4*4 then its capacity is maximum.

IV. CONCLUSION

In this paper, we have presented the MIMO OFDM model using MATLAB. The results of simulation form the model will enable the researches to choose water filling algorithm for their requirements. MIMO has helped to ISI problem. The Results indicates that the Capacity

is enhanced significantly by transmitting the data through different channels. The simulation results shows that water filling algorithm give enhanced results for Rician channel

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