

Figure 4: Plot of Sum Rate of Network Vs Transmit Power to Noise Ratio

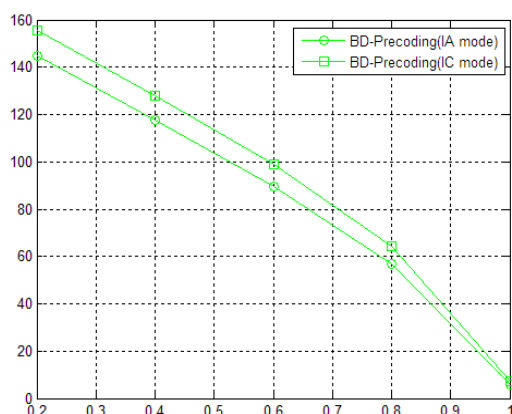


Figure 5: Plot of Sum Rate of Network Vs BS-MS Intra-Cell Distance in ZF Precoder

4. Conclusion

This anticipated work is designed using MATLAB which is known for its flexibility and dependability. Rapidly growing wireless technology is reaching almost every individual, which leads to demanding the networks with improved performance and great speeds. By increasing the speed of accessibility the MIMO systems can provide higher mobility with higher data rates. The framework proposed is to design a precoder for downlink in MIMO systems. The connection between BS to MS is identified as downlink. Here precoder using BD, BD_DPC and ZF algorithm is designed and results are verified under IA mode and IC mode. Comparison plots are plotted for network performances under several circumstances. ZF precoding gives almost same network performance as BD, BD_DPC but calculation difficulty reduced to a pronounced magnitude. In this work it is noticed that only single carrier systems are treated.

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