B09602017
白宗民

INTRODUCTION TO WIRELESS AND MOBILE NETWORK HW1

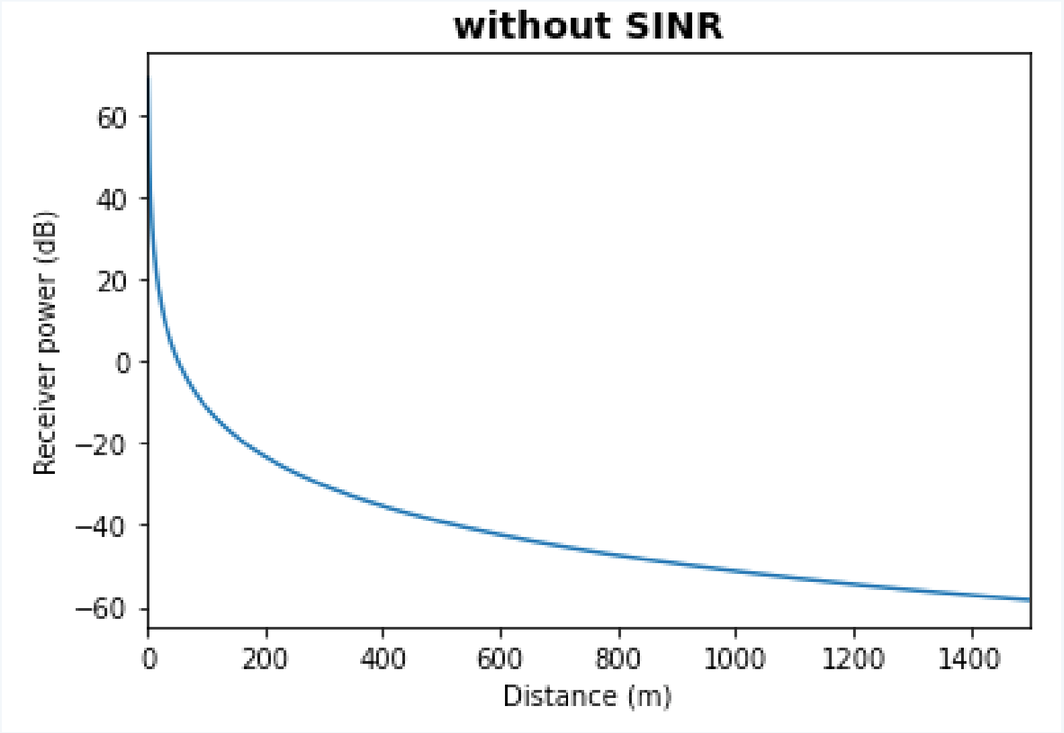
Today's Discussion

MAIN POINTS

1. Radio propagation without shadowing and fading
2. Radio propagation without shadowing and fading but with **SINR**
3. Radio propagation with shadowing
4. Radio propagation with shadowing and **SINR**

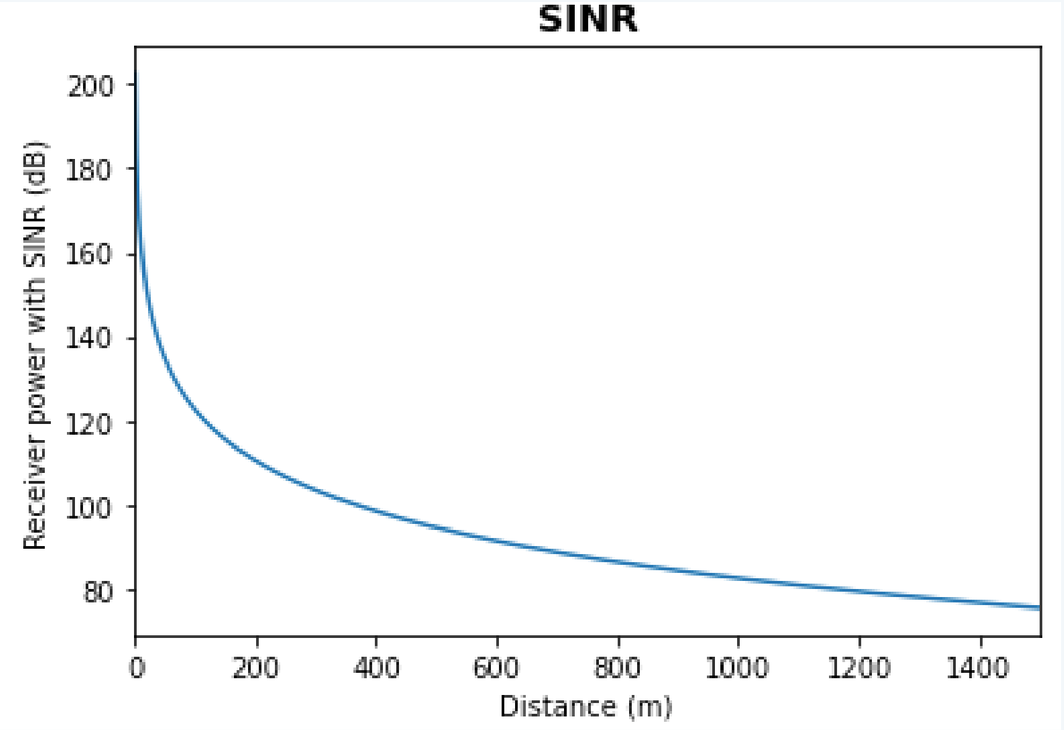
1.
This is the figure of the received power of the MS v.s. distance between the BS and MS .

Since the g(d) is divided by d^4, so the received power near the y-axis would be extremely large.



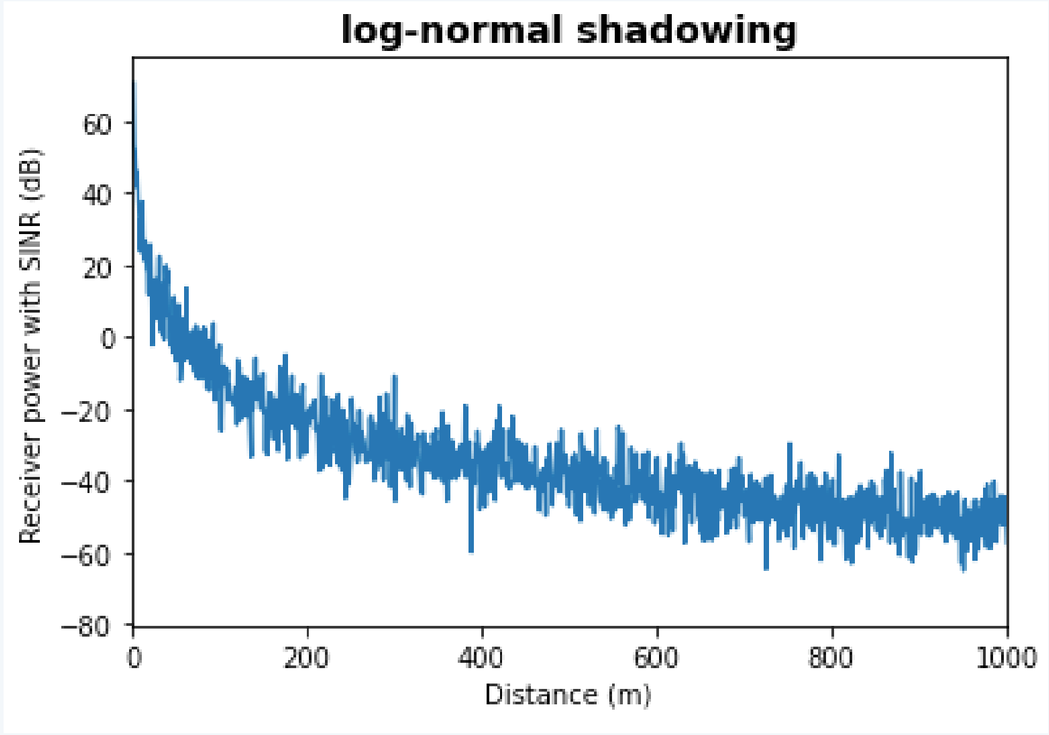
2.
This is the figure of the received power of the MS v.s. distance between the BS and MS with SINR.

Since the interference in this model is 0, SINR would only consider the thermal noise. And SINR cause the shift in the y-axis.



3.
This is the figure of the received power of the MS v.s. distance between the BS and MS with shadowing.

Since the shadowing is log-normal, the figure won't be the same every time.
The mean is 0 and the standard deviation is 6dB.



4.
This is the figure of the received power of the MS v.s. distance between the BS and MS with shadowing and SINR

Since the interference in this model is 0, SINR would only consider the thermal noise. And SINR cause the shift in the y-axis.