Homework III

1. (20%) Implement a Rayleigh fading channel simulator based on the Filtered Gaussian Noise method
   - Plot the channel output for $f_m T = 0.01$, 0.1 and 0.5 ($t/T = 0 \sim 300$)
   - Plot the channel output autocorrelation for $f_m T = 0.01$, 0.1 and 0.5 ($f_m \tau = 0 \sim 10$)
2. (20%) Implement a Rayleigh fading channel simulator based on the Sum of Sinusoids method
   - Plot the channel output for $M = 8$ and 16 ($f_m T = 0.01$, 0.1, 0.5 and $t/T = 0 \sim 300$)
   - Plot the channel output autocorrelation for $M = 8$ and 16 ($f_m \tau = 0 \sim 10$)
3. (10%) Discuss and compare the results of different cases.

- 助教: EECS Room 605, TWNTHUCOM5170@gmail.com
- Due Date: **11/09** (You shall submit your report and program to the class email account.)