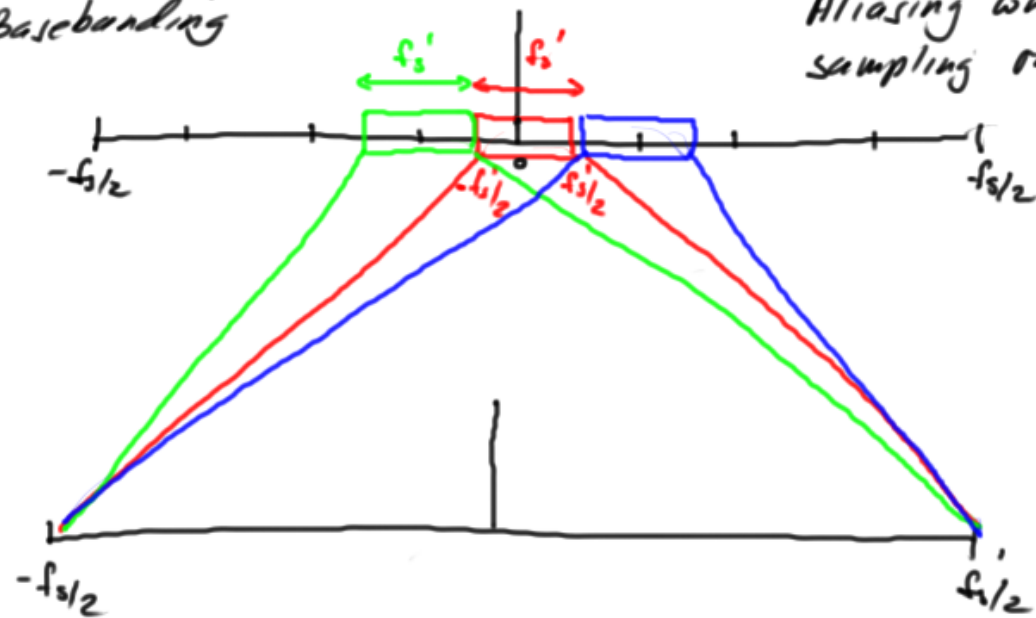




Mid-Term Projects

Mid-Term Projects

IA. Complex Basebanding



Aliasing when reducing
sampling rate from f_s to f_s'

$$f_s' = \frac{f_s}{8}$$



Mid-Term Projects

III A. Quantization Noise

see e-mail sent to class with additional notes on the mid-term projects,

- Sufficient to plot correlation functions for the following range of m
autocorrelation $m = \{0, \dots, 63\}$
cross-correlation $m = \{-63, \dots, 0, \dots, 63\}$
- For power spectra, it is sufficient to plot a single $|FFT|^2$ properly normalized. For comparison purposes, you are welcome to segment the time series and generate an averaged spectral estimate.
- Calculate theoretically what the expected value of $C_{ee}(0)$ should be and compare with your results.