

SMS 491, 2012, Sounds in the ocean
Assignment 3. Quantitatively analyzing sound.

Based on Petersen's Musical analysis and synthesis in Matlab
(<http://amath.colorado.edu/pub/matlab/music/>)

Plot the time series (short enough you can see the waves) and power spectra of

1. low, middle and high A on a piano.
2. Middle A played by different instruments.
3. The beating pattern you generated before (using a 440 and 450Hz tone).

Plot time varying signal (for ~ 0.02 s) and spectra for each. Are they consistent (that is, is the energy in the band you expect)?

Feel free to you analyze.m from Petersen's site.