Abstract

This paper reveals the comparison of various estimation methods to evaluate the most suitable among parametric, non-parametric and subspace method for narrowband and broadband applications using MATLAB. Comparison is done on the basis of same SNR, Overlay and complex sinusoid. Subspace method proved to be the best as the Estimated PSD is in close proximity with True PSD. Also, reduced spectral leakage of 7.5% and side lobe attenuation of -11.3dB has been achieved by using Music and Eigen vector in subspace method whereas in non parametric method spectral leakage is 9.12% and side lobe attenuation is -13.2dB with noise in the signal.

References


Index Terms

Computer Science

Circuits and Systems

Keywords

PSD, SNR, Spectral Leakage, Side lobe attenuation.