

Figure 20: Biased and Unbiased Estimates of ACF and their Effect on the Correlogram

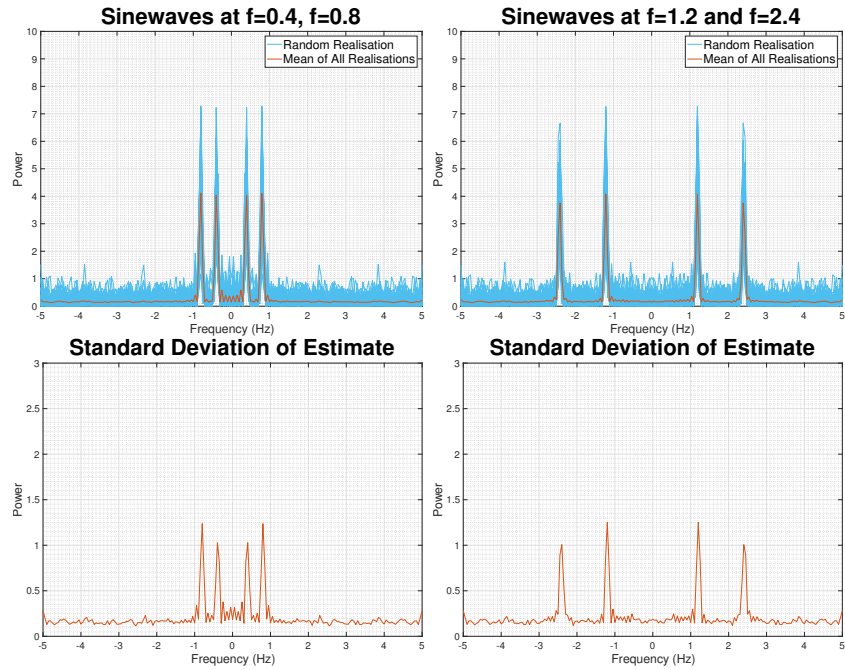


Figure 21: Variance and Standard Deviation of Correlogram Spectral Estimates

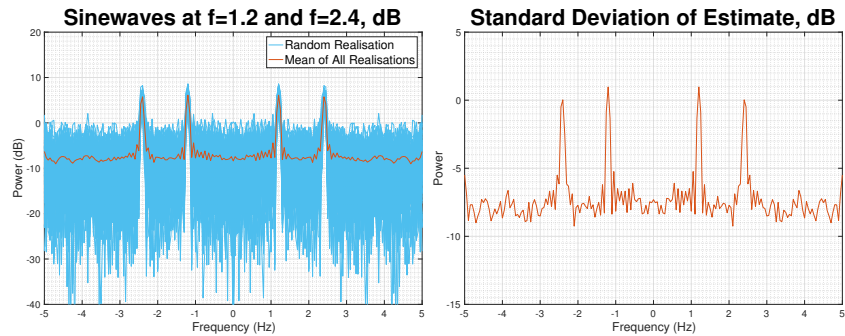


Figure 22: Effect of dB Scale on Spread of Variance and Standard Deviation of Correlogram Spectral Estimates

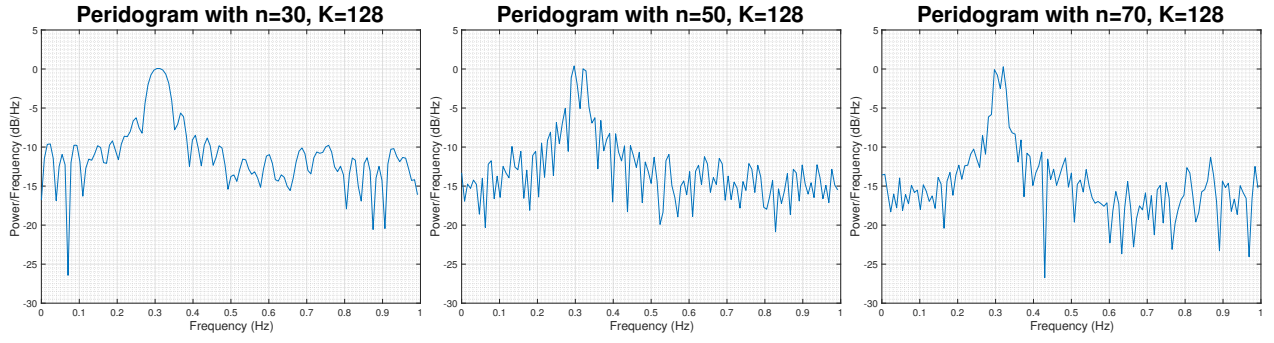


Figure 23: Effect of Increasing Number of Samples on the Resolution of Periodogram Spectral Estimate

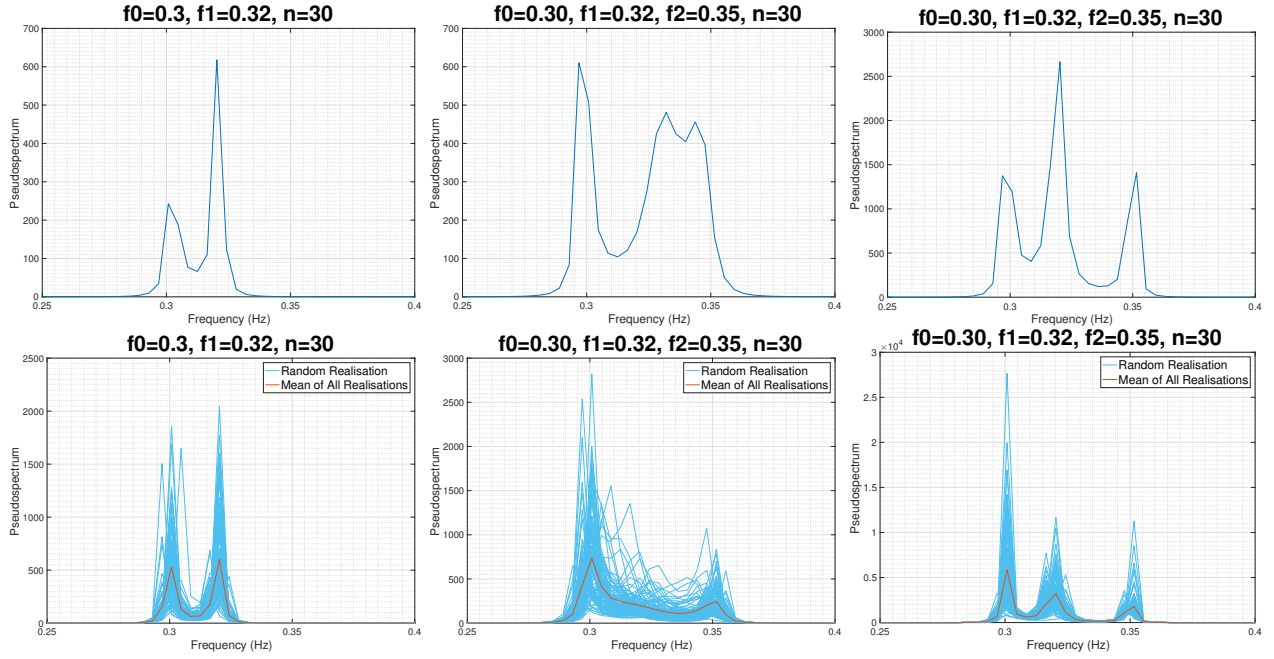


Figure 24: Detecting Sinewaves using MUSIC, and Effect of Increasing Number of Samples on the Resolution of Estimate

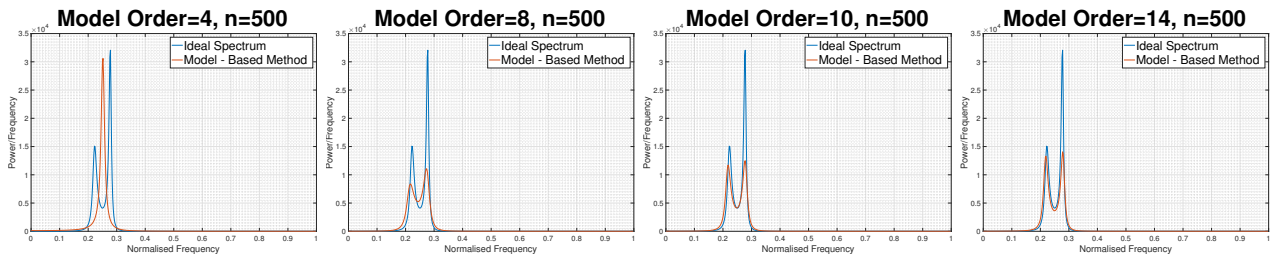


Figure 25: Power Spectrum Estimates Using All-Pole Autoregressive Model of Orders 4, 8, 10, 14

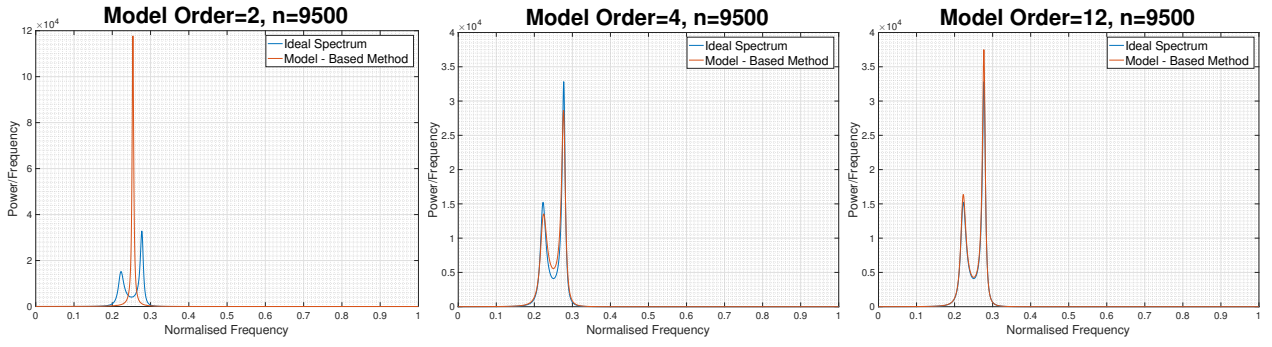


Figure 26: Effects of Underfitting and Overfitting Autoregressive Models

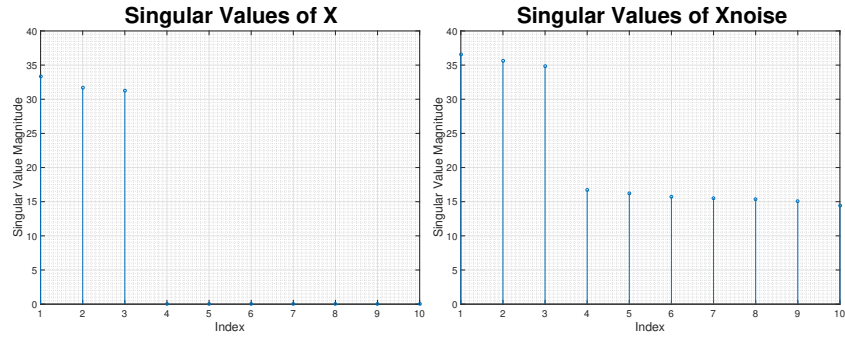


Figure 27: Singular Values of Matrices  $\mathbf{X}$  and  $\mathbf{X}_{\text{noise}}$

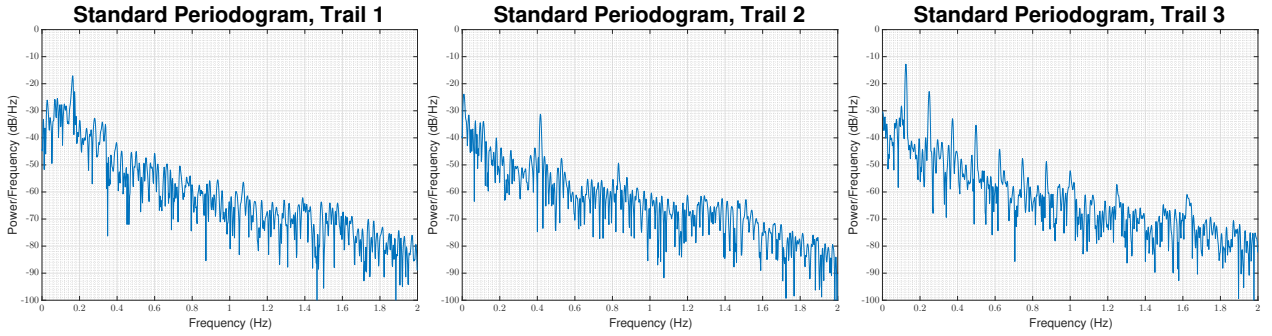


Figure 28: Standard Periodograms of RRI Data obtained from Three Separate Trials

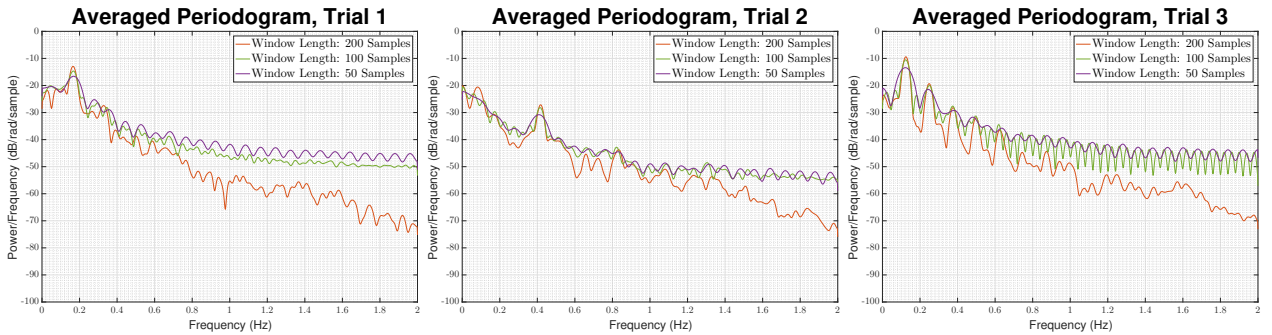


Figure 29: Averaged Periodograms, with Different Window Lengths, of RRI Data obtained from Three Separate Trials



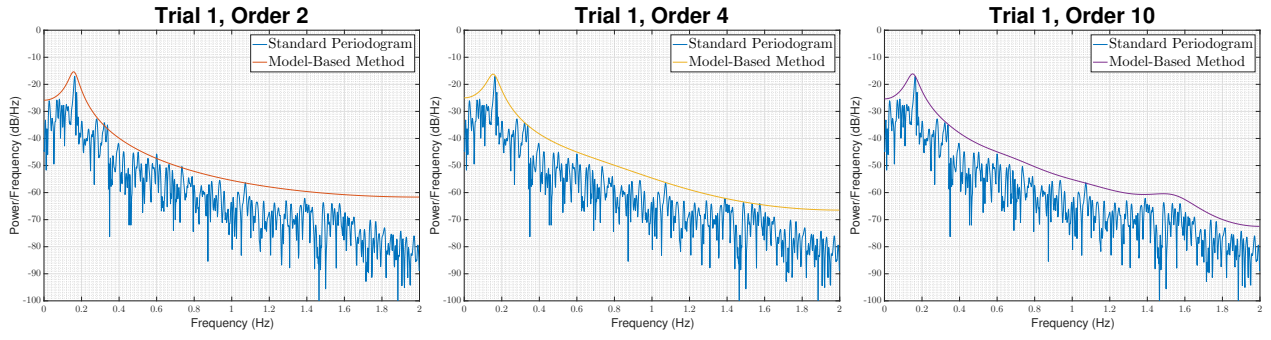


Figure 30: Autoregressive Spectrum Estimate for Trial 1 for Models 2, 4 and 10

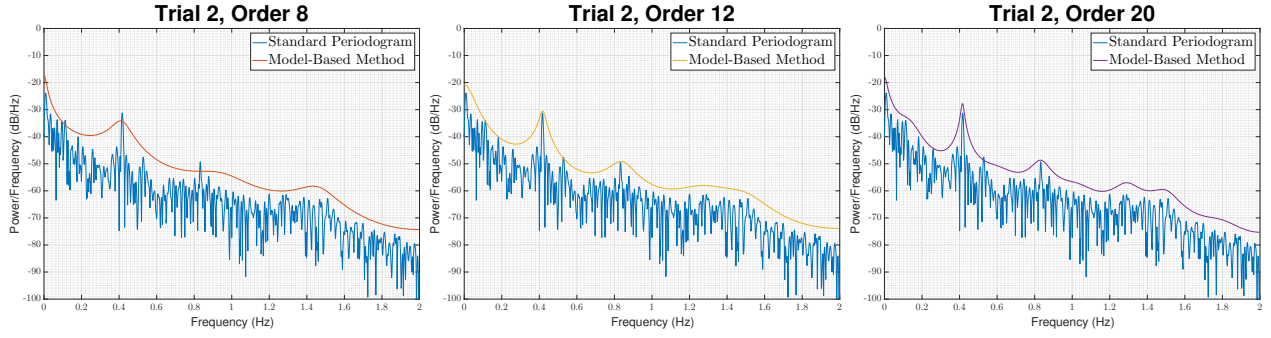


Figure 31: Autoregressive Spectrum Estimate for Trial 2 for Models 8, 12 and 20

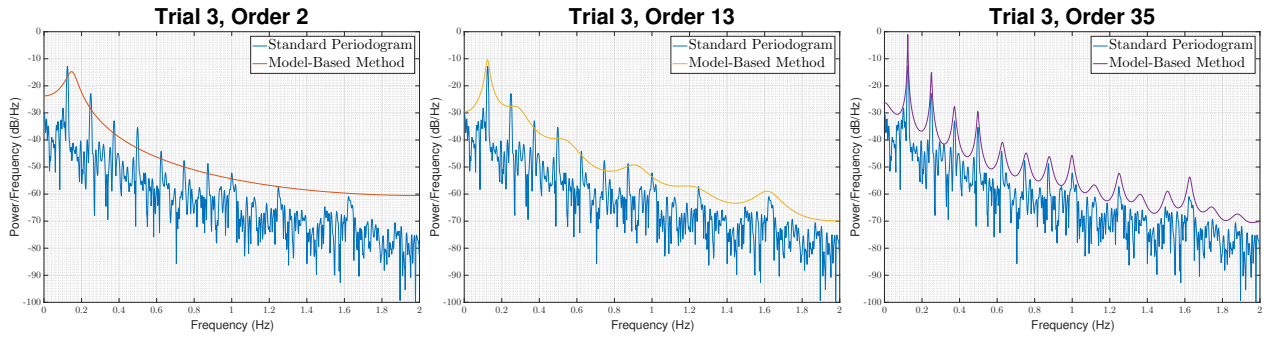


Figure 32: Autoregressive Spectrum Estimate for Trial 3 for Models 2, 13 and 35