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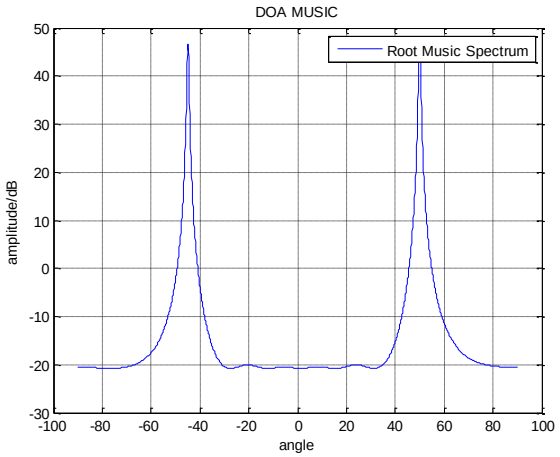


Figure 4: MUSIC pseudo spectrum and roots found with root-MUSIC for $\theta_1 = -45^\circ$ and $\theta_2 = 50^\circ$

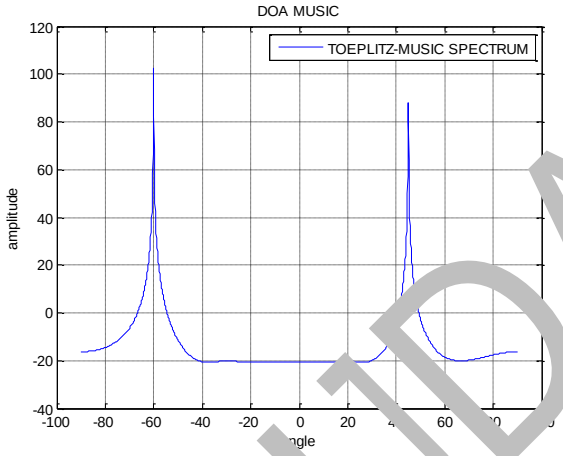


Figure 5: MUSIC pseudo spectrum found with Toeplitz-MUSIC for $\theta_1 = -45^\circ$ and $\theta_2 = 50^\circ$

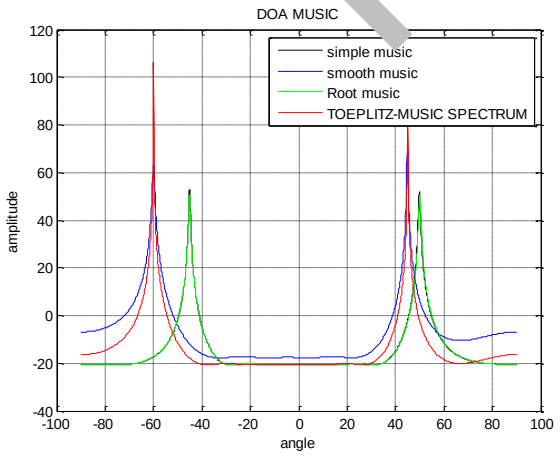


Figure 6: Comparative MUSIC pseudo spectrum for different algorithms

## V. CONCLUSION

The MUSIC algorithm has greater resolution and accuracy than the other algorithms (i.e. Bartlett, CAPON) and hence they are being investigated much in detail in much literature. The results show the performance of simple MUSIC, root MUSIC and toeplitz music is better that smooth music. The performance can be improved with more elements in the array, with higher number of snapshots of signals and greater angular separation between the signals. These are responsible for the form of sharper peaks in MUSIC spectrum and smaller errors in angle detection.

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