Slides results

Conclusions:

1. SVD-method has sharper peaks than MUSIC under the same SNR
2. SVD-method has much less complexity than non-SVD sparse representation-based method( K (# of sources ) VS N (# of snpashts), usually N>>K)
3. SVD-method can effectively deal with correlated sources than MUSIC
4. SVD-method( and sparse-based method) does not require the knowledge of the actual # of sources

Spatial spectrum

DOA= -20, 0, 50, 75 respectively









(3) w=[pi/3, pi/3]

SNR= 20 dB

DOA =[-30 30]



Doa=[-10 10]



Doa=[-5 5]



Dao=[-4 4]



W=[pi/3 pi/3.01] less correlated sources, MUSIC acts slightly better ,but much worse than SVD SNR= 20 dB

DOA =[-30 30]



DOA =[-10 10]



DOA =[-5 5]



DOA =[-4 4]

