Mock DataChallenge

Mock Data Challenge!

Given

- Training data containing only noise: TrainingData.mat
- Noise is Gaussian, stationary
- Data to be analysed: analysisData.mat
- Signal: Quadratic chirp
- Parameter search ranges:
- $a_1 \in [40, 100]$,
- $a_2 \in [1, 50]$,
- $a_3 \in [1, 15]$

Find

- Is there a signal in the analysis data?
- If so, estimate its parameters
- Use PSO to obtain GLRT and MLE