

SEE 25.3.14

1. Use the data in `/cancomparison/can/finalPlaceCanNoiseInstant.txt` and prove empirically that all observed distributions are well approximated by Gaussians, determine their mean value and variance.
Hint: use either `chi2` by hand or use MATLAB tool „`dfittool`“
2. Read, understand and discuss all technical terms for measurement

3

3. In MATLAB Statistics toolbox study the example „Fitting Custom Univariate Distributions“, subsection „Fitting a More Complicated Distribution: A Mixture of Two Normals“. Study how close the mixture of Gaussians can approximate the given sample data (generated by students distribution). Then generate sample data by true gaussians, rehearse and determine, if now the quality of approximation is any better, then same or worse.