

Group F Task (Maximum Likelihood)

to present Th., Sept. 28!

Homework F: Samples for X : 0, 3, 4, 5 and $X \sim N(\mu, \sigma)$. Compute the likelihood of the 4 samples and $L((\mu, \sigma) | X)$ using: a. $N(3, 1.5)$, b. $N(1, 1)$ and the formula $L((\mu, \sigma) | X) = p_{\mu, \sigma}(0) * p_{\mu, \sigma}(3) * p_{\mu, \sigma}(4) * p_{\mu, \sigma}(5)$
c. What values does the maximum likelihood estimator (MLE) choose for (μ, σ) ? Compute $L(\dots)$ for its choice! d. How, in general, does the MLE work?