

Group Homework 3

- Derive the EM algorithm for a mixture of exponential distributions:

$$P_X(x) = \sum_{i=1}^C \pi_i \lambda_i e^{-\lambda_i x}$$

- Write down the E-step
- Write down the M-step, solve the maximization and derive iterative solutions for λ_k and π_k
 - hint: Use the Lagrangian....