

Week 4-Session 1: Outline

1. [Before Break: 50 mins]

- a. Lecture [10 min] Q&A
- b. [40 min] EM problem 1 {[1_W4S1_EM1_A.pdf](#)}
 - i. [5 mins] think about how to do it
 - ii. [35 mins] Go over [1_W2S1_EM1_B_SimpleProblemsolution.pdf]

2. [After Break: 60 mins] GSP: Code

- a. [20 min] Student practice with the same type of problem
 - i. [15 min] isomorphic on mu estimation: {[2_W4S1_EM2.pdf](#)}
 - ii. [5 min] Share the answer (Q&A)
- b. [30 min] Explore EM-GMM programming {[3_W4S2_Code_EMGMM/EMGMM_demo.ipynb](#)}
 - i. {10 min] Student Explore & Code explanation
 - ii. [15 min] Student explore the working code
 - iii. [5 min] Share what you found
- c. [10 min] Q&A, closing