

**Homework 5**

Due by

Tuesday 31 October 2017 17:00

Consider the paper “Estimation of the population spectral distribution from a large dimensional sample covariance matrix” (2013) by Li, Chen, Qin, Bai, and Yao.

**Question 1** [5 marks]

Implement “the method” from Section 3.1 of the paper and demonstrate that it works using an experiment of your choice (e.g., see Section 4 and Section 5). You can use the function ‘optim’ to find the least squares solution of  $\theta$  in Step 3.

Note: I’ve placed some example code on Wattle and read the paper for some “good” choices of parameters.