

Problem - 6 (Spring 2026)

Due date: 19 February, 2026

1. a) Calculate the bond-angle distribution of a set of particles using the nearest-neighbor (NN) map of the particles. Use the data file provided for this problem and assume that the NN distance between two particles can be up to 2.8 units.  
b) Calculate the mean and standard deviation of the distribution directly from the angle data, and from the distribution.  
c) Fit the distribution using an appropriate function. You may use ready-made “fit” function for this purpose.