

BRADLEY UNIVERSITY
Electrical and Computer Engineering
ECE443/543 — HW 4

Given a static, undirected, connected graph, let

$$\dot{x}_i = - \sum_{j \in \mathcal{N}_i} (x_i - \xi_i - x_j + \xi_j)$$

where ξ_i, ξ_j are points satisfying

$$\|\xi_i - \xi_j\| = d_{ij}, \quad \forall i, j = 1, \dots, n, i \neq j$$

and $d_{ij} = d_{ji}$ is the desired separation between agents i and j . Write a program to show that all agents will converge to the desired formation specified by ξ_i, ξ_j .