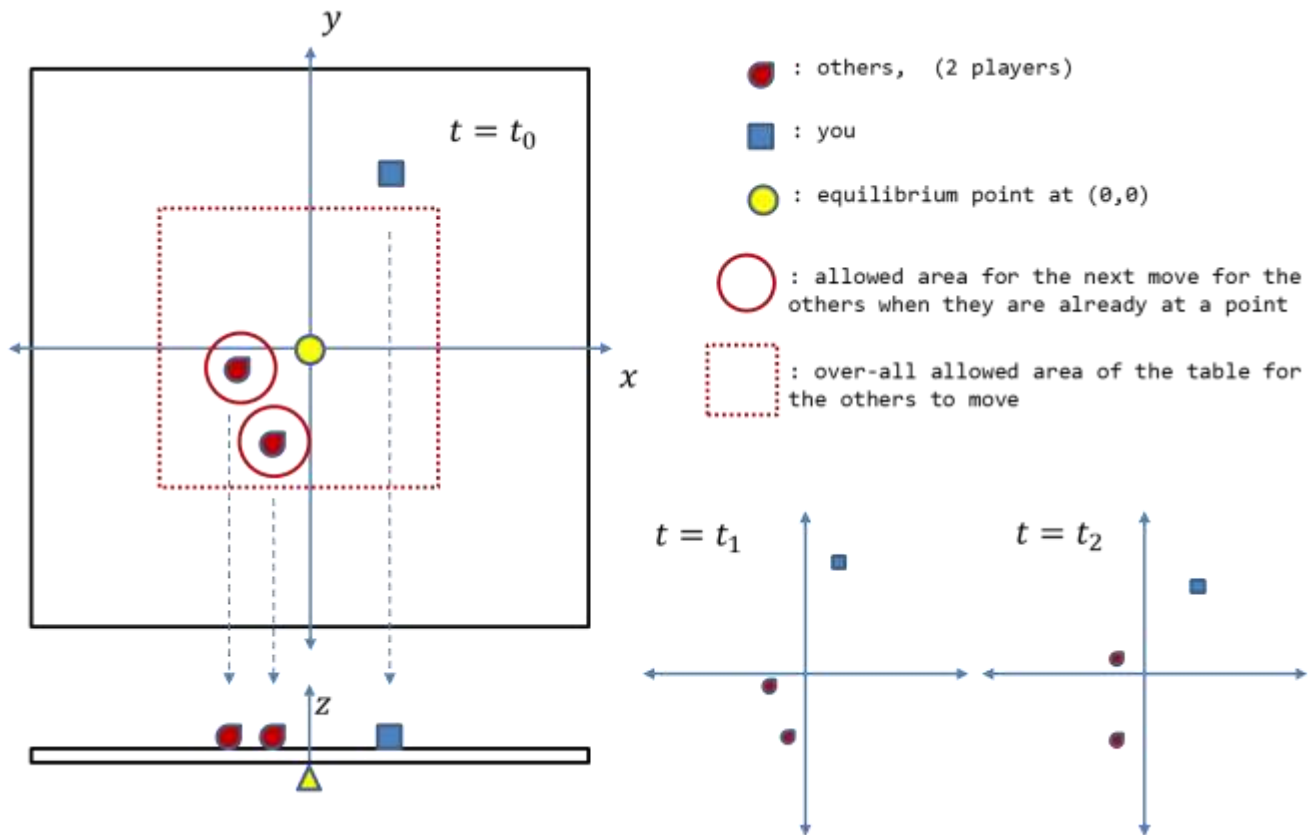


## Assignment 1

Due Date: Dec.4.2022



1 -

On a 2D table positioned on an equilibrium point (0, 0) 'others' are having random walks within a designated area (red square) and are limited to a circular area to have the next move. And you try to bring the table to equilibrium all the time with a move only limited to the table boundary.

Simulate the required moves for 25-time instants.

List (x,y) coordinates of all players.

Compute the distances of the players from the center at each time.

e.g :  $S = 64$

Size of the table:  $S \times S$

Size of Red area:  $S/2 \times S/2$

the radius Circular area:  $S/16$

\*The mass for each player is the same.

- Submit your .cpp code and single-screen image(s) for your run in one zipped folder.
- A suitable name for the folder can be KOM3550\_YourName\_YourNumber\_Assignment1.{zip/rar}. Write a relevant title for the email you are sending. KOM3550\_YourName\_YourNumber\_Assignment1 is a good option.

**"No other e-mails will be even opened".**

Dr. Muharrem Mercimek

- a. The due date is firm. The files should be submitted by the end of the due date.
- b. Submit your documents using the online system