REPORT

ASSIGNMENT 3, BD SIMULATION

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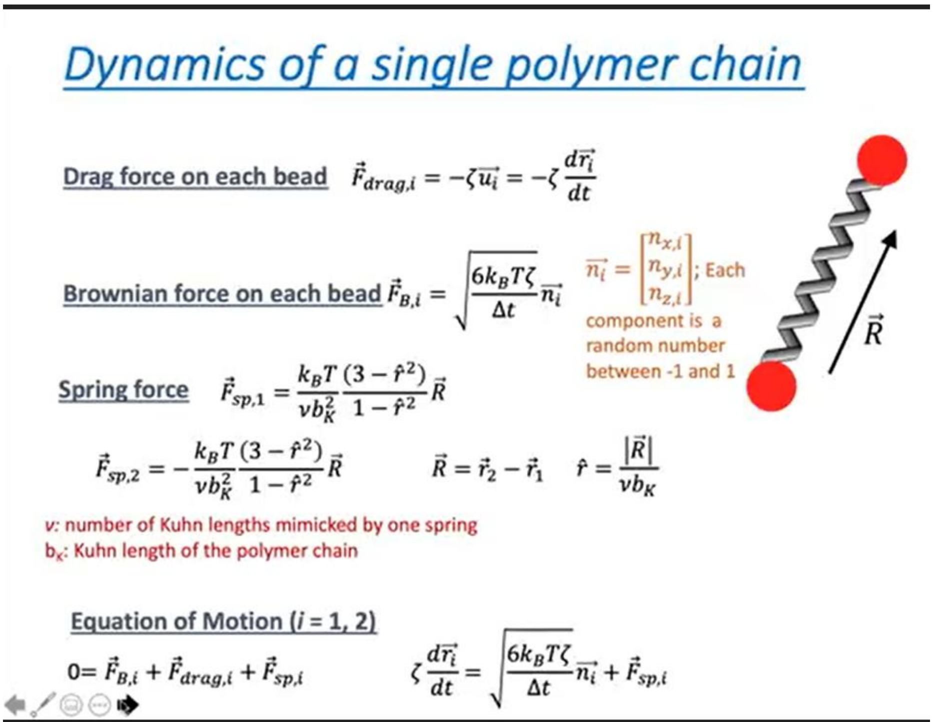
Problem statement

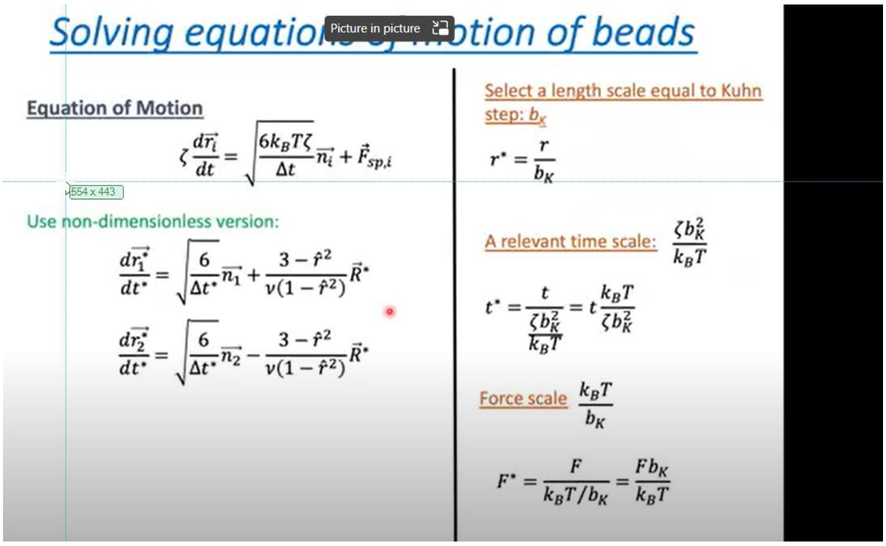
In this assignment we were required to plot the dimensionless distance between the 2 beads of the dumbbell model of the polymer as a function of dimensionless time and also the rms value of the separation.

Solution

The code in the last assignment was for one isolated particle dispersed in a medium. In this assignment we modelled an isolated polymer chain as a dumbbell with 2 beads by slightly modifying the previous code by including the force due to the spring. Now three forces act on each bead.



We solve the dimensionless equation of motions, using similar approach as done in previous 2 assignments.



CODE OUTPUT

```
RMS VALUE IS :
    21.1698
```

Plot