**Readme**

The kinetic\_simulation\_si.m file contains the main program for the kinetic simulation.

The testdata.txt file contains a sample data of time-extension trajectories. The first column is time in seconds and second column is talin extension in nm.

The gendist.m and samexaxis.m were obtained from MathWorks FileExchange and were included here under BSD liscence.

The program requires Parallel Computing and Symbolic Math Toolbox and was written and tested on Matlab2014a.