Tilting Polymer Update

1/21/2019
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last week's objectives

1. Constraining polymers onto substrate
2. Implement position probability tool
3. Calculate Δt per snapshot
4. Is this what I expect?

Lots of work!

The solutions to last week's issue was to create a deep potential around the starting polymers. Temperature was added and things aren't breaking (good sign?).

Created the early version of a position probability distribution. Definitely will do something else, to make more readable in the near future.

I used average potential energy to calculate the time it takes for the particle to move 3*r , and made that my dt. There is friction in the system.

Position Probability graph

Mass = 1
Fpull = 2
kT = 1
Time_step = 0.0001
Dt snapshot = 0.2

Potential_A = 1
Period = 1
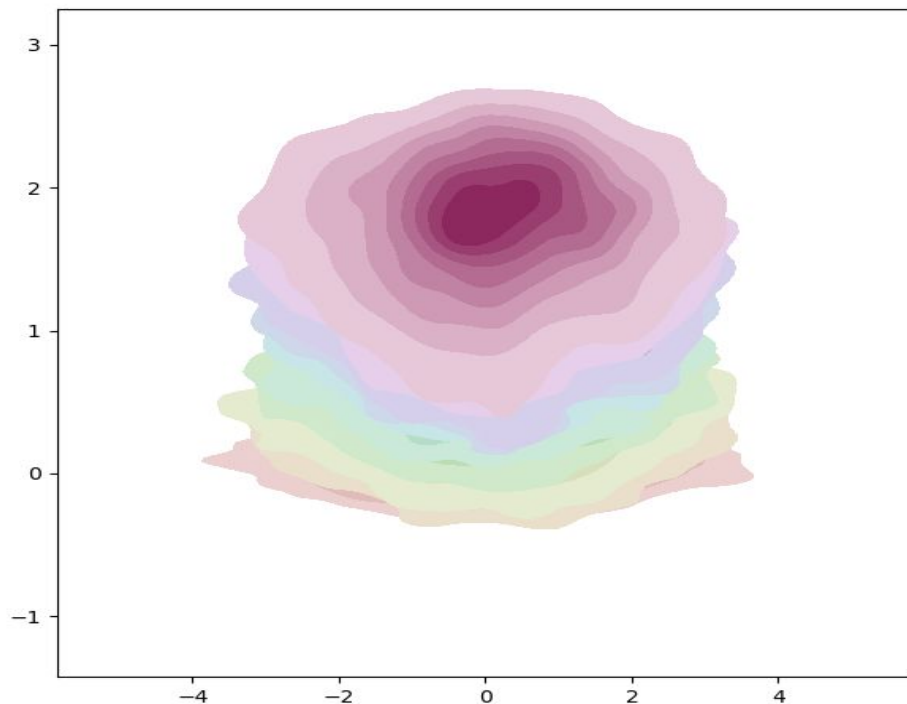
Was this expected?

No. I expected the probability to be flat across the whole width of the box.

Next objectives

1. Create readable probability distribution
2. Observe movement for a larger/longer system.
   a. Does this match expectations?
   b. Bug squashing.

See animated GIF- PolymerAnimated.gif