

Update 3

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November 30, 2014

There have not been many updates in the past weeks; however, by M14, the following updates have occurred:

- The equations governing the potential energy of the intermolecular interactions between the molecules have been formulated. They are largely based off of the Lennard-Jones potential equation with the addition of the dipole-dipole force into the potential equation for methyl bromide; so the equation may not be 100
- A program using arrow keys to move objects was created; this will be applied to the final program. One molecule will stay at the origin of the space and the other molecule will move toward and away from the other molecule while the magnitude of an arrow shows the amount of potential energy in the interaction at the particular distance. A graph will also be made to go alongside this.
- It was discovered that the final dipole moment of a molecule cannot be expressed from the sum of the dipole moments of the bonds of a molecule (but the inverse can be applied), so a dipole moment parameter was added to each molecule.

Future plans include the following:

- The program still needs to actually be created but this should be simple as everything is in place to do so.
- Documentation of the math of the project and program needs to begin.
- The seminar presentation needs to be updated.
- I want to create .gif files of the rotating molecules created in molecules.py.
- The website needs to be updated.