

# Calculating Potential energy of a system of water molecules

The electrostatic, vanderwaal and total energy were calculated using the code. The outputs for the code are:

```
electrostatic energy: -5159.430611238769
Vanderwaal energy:    599.7631387966753
Total energy:         -4559.667472442094
```

electrostatic energy and vanderwaal energy was calculated for  $^{432}\text{C}_2$  pairs of water molecules. It wasnt calculated for intramolecular atoms.