12/19/13  Diffraction & Interference

- We started by setting up the computer software to record both light intensity & position data.
- We are using a 532 nm green laser.
- The distance between the slit and the light sensor is 36.3 cm or 1.363 m.
- We are using a slit width of \( a = 0.04 \text{ mm} \)
  \[ a = 0.00004 \text{ m} \]
- We
- The distance from the slit to the laser does not matter because the laser is traveling in a single beam before it hits the slit.
- For the light sensor, we used the aperture opening and the amplifier in order to get data in which we could sufficiently analyze.
- We had some issues w/ the laser having a low intensity but after adjusting the slit and laser position we got the laser intensity to a satisfactory level.
- Due to not running out of time, we decided to take the data for both single & double slits and to analyze & graph the data when we return after break.

Merry Christmas!