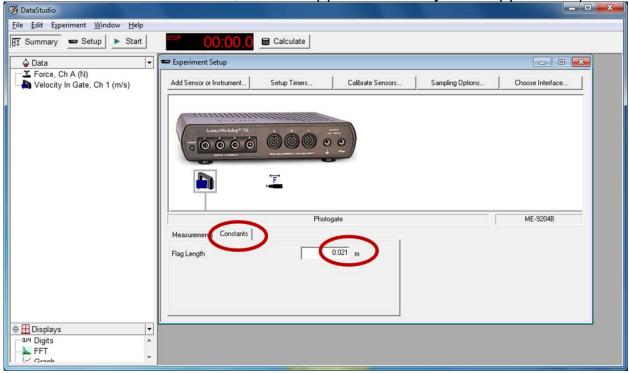
Beginner's Guide to data acquisition, using DataStudio

1. Locate the black "Science Workshop 750" interface box on your lab table, and check that the green power light, on the front left. is illuminated.(If the box is not yet turned on, reach around to the back right and flip on the power switch.)

2. Open the *DataStudio* program by clicking on the icon located in the "Dock" at the bottom of your screen. (If the Dock is not visible, move your cursor to the bottom of your screen, to make the Dock reappear. As you position your cursor over each icon in the Dock, text will appear to identify each application.)



- 3. If you don't see the representation, shown above, of the black interface box, click "**Setup**" (near the left of the bar across the top of *DataStudio*). The setup window should now be visible, showing the interface box.
 - A yellow notification box towards the bottom of your screen should say that connection has been established. If ever you forget to first turn on the black "Science Workshop 750" interface box, then it will instead say "DataStudio could not connect to the interface...." At that point, you'll have to quit the application, power on the black "Science Workshop 750" interface box, and then restart the DataStudio application.
 - The cartoon of the interface box has yellow circles around each port where you might connect a cable.
- 4. Click on any port where you have a wire connected. For *input* ports, this brings up a dialog box with an alphabetical list of sensors.

- 5. Select an appropriate sensor (e.g., a "Photogate"). This brings up a new set up options (where important inputs may be hidden on "tabbed" pages). *Explore* each tabbed page, changing the default choices to selections more appropriate to your experiment. If you fail to make appropriate choices at this stage, you won't get the results you want! (If you are unsure what some option implies, be sure to ask for clarification.)
- 6. The measurements you have elected to take appear in a visible list at the top left of the program, in the "Summary" window. You can drag any of those items onto any **display type** contained in the list beneath the list of measurements to be made.
- 7. If you are prepared to take data, click **Start**.
- 8. Eventually, you may wish to export your data, for analysis in another program. One way to do this is by clicking "**Export Data**" under the File menu.
- 9. To open the data in *Igor Pro*, first open the *Igor Pro* app (which is also located in the Dock). Next, click on "Data" and then "Load Waves," and then "Load General Text." If you wish to display the data in a table, click on "Table" and "Append Columns to Table"