# Update #3

#### HITS FROG takes a Field Trip!

#### What have I been doing?

- \* Reading about Ultrafast Optics
  - Trebino slides Nonlinear Optics
- \* NI USB DAQ in LabView Digitize the HITS Lab
- \* Synchronization of FROG using PULSAR
- \* Comparing traces from HITS FROG and PULSAR FROG
- \* HITS Clean-Up!

### DAQ



- \* Six Programs
- \* Lots of LabView
- \* Testing Batteries
- \* Between Computers
- \* Bad Soldering
- \* Mess of wires

### **Front Panel**

	Voltages		
÷0	-0.00	Supply 1	Error Out
30	-0.01	Supply 2	status code
	-0.01	Supply 3	
	-0.02	Supply 4	source
	-0.01	Supply 5	
	-0.01	Supply 6	
Q	)uit Readin	9	

#### **Block Panel**



## Synchronization by Trigger



- \* MCX to BNC Adapter Arrived
- \* Trigger worked
- \* Pulse Generator/Delay
- \* Oscilloscope
- \* Changing up the FROG program



#### What's Next?

\* Calibrating Wavelength with Pixel Number

- \* Laser Pointer
- \* Ocean Optics Spectrometer
- \* Making sure we are at our best alignment
- \* Putting more power into the Spectrometer
- \* Taking more FROG traces
- \* See if our traces get better with less noise