

## ISPP REMINDER

November, 2014

### OUR NEXT MEETING...

...is at  
DePaul University  
Tuesday December 2  
6:30 – 9:00 pm  
Eric Landahl (773) 325-3722

Go to the last page for a map and directions.

### FUTURE MEETINGS...

Jan 3-6 (S-T)	AAPT Winter	San Diego, CA	
Jan 14 (W)	Tri-Physics (34 <sup>th</sup> annual)	Elmhurst College	Brian Wilhite/Venkatesh Gopal/Earl Swallow
Feb 19 (R) ?	ISPP	NEIU	Paul Dolan
Mar 2-6 (M-F)	APS	San Antonio, TX	
Mar (?)	ISPP	Loyola University	Gordon Ramsey
Mar 12-15 (R-Sun)	NSTA	Chicago	
Mar/Apr ? (S)	CSAAPT		
Mar/Apr (F-S)	ISAAPT		
May 4 (M)	ISPP	Northwestern University	Art Schmidt

### At our last meeting...

...at Oak Park & River Forest High School (OPRF), we were greeted by our host Kevin McCarron.

**Martha Lietz** made several announcements to keep us up to date on the calendar. She also told us that there will be new rules in place for CPDU providers. She said she would bring the forms to the CSAAPT meeting on November 8. Physics Northwest now has a discussion board. Andy Morrison asked if we should consider such a thing for ISPP>

Three of Paul Dolan's students from NEIU, Betti Shahin, Daisy McNroy, and Arely Solis, were present and eligible for new teacher bags. Unfortunately, only two bags were available – an incentive to attend the next meeting.



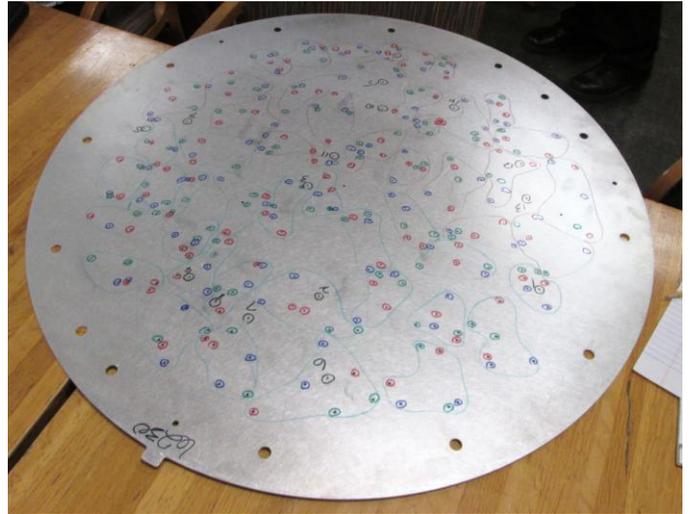
**Kevin McCarron** then showed us an interesting phenomenon. "What is it?" He asked. We saw a large circular aluminum disc about .75 m in diameter, with a dozen holes around the periphery. There were many smaller holes with different colored circles drawn around them. These were clustered in a somewhat irregular way. Kevin told us this plate was related to data received from the 2.5 m telescope operated by the Sloan Digital Sky Survey. The small holes mark the locations of optical fibers connected to a spectroscope that analyzes the light received by the telescope. There is a wealth of information about the telescope and its operation at <http://skyserver.sdss.org/dr4/sp/sdss/telescope/telescope.asp> Contact Kevin for more information.

**Vince Martinek**, also of OPRF, supplied a handout, the 2015 Chicago Regional Bridge Building Specifications. The contest will be held on Tuesday, January 27, at IIT. Go here for the handout and other materials:

<http://bridgecontest.phys.iit.edu/public/international/index>

The winning bridge will be the one with the highest efficiency,  $E = \text{Load supported in grams (50,000g maximum)} / \text{Mass of bridge in grams}$

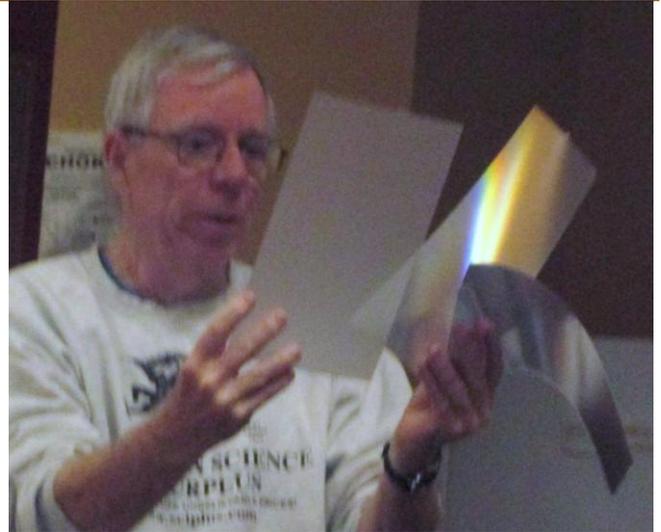
Roy Coleman mentioned that his students' grades were based on efficiency and a drawing of the forces involved.



**Pete Insley**, working with his son Alan, took a laptop screen apart and identified the function of each of three pieces. The back segment has a row of LEDs across the bottom that supply the backlight of the screen. Pete identified the other two segments as a polarizing filter and a liquid crystal display.

**Karlene Joseph** (Lane Tech High School) showed us a lab she uses to illustrate inertia. Three small wood blocks are stacked on a small car and the car is pushed twice. The first push is gentle and the blocks remained stacked until the car hits an obstacle; then the blocks move forward off the car. When the car is given a much harder push the blocks come off the back of the car. Karlene also illustrated inertia by putting a knife

partway into a potato. She asked what to do to put the blade further into the potato. Then, holding the knife handle with the blade pointing downward, she hit the end of the handle and the potato moved up the knife!



**Paul Dolan** (NEIU), in the spirit of Halloween, brought some squishy materials (one looked like an eye). When he dropped them on the floor they flattened but quickly recovered their shape.

Finally, Kevin McCarron showed us some books he has been able to use to help the physics learning of students who are deaf or hearing impaired. He also uses a talking multimeter and said the source was [www.mpja.com](http://www.mpja.com). (I tried this and it appears the meter is no longer available; Radio Shack once sold an item like this.) Thanks to Kevin, Vince and OPRF for a good evening of physics pun.

## To get to DePaul University:

### From the north and northwest

From the Kennedy Expressway (I-90/I-94) exit at Fullerton Avenue and turn left (east.) The Lincoln Park campus is approximately two mile from the expressway on Fullerton Avenue at Kenmore Avenue.

### From the west

From the Eisenhower Expressway (I-290), turn onto the Kennedy Expressway (I-90/I-94) heading toward Wisconsin. From the Kennedy Expressway (I-90/I-94) exit at Fullerton Avenue and turn right (east.). The Lincoln Park campus is approximately two miles from the expressway on Fullerton Avenue at Kenmore Avenue.

### From the south

From the Dan Ryan Expressway (I-90/I-94) continue as the expressway becomes the Kennedy Expressway (I-90/I-94). Exit at Fullerton Avenue and turn right (east.) The Lincoln Park campus is approximately two miles from the expressway on Fullerton Avenue at Kenmore Avenue.

### From Lake Shore Drive (north or south)

Exit Lake Shore Drive at Fullerton Avenue. Head west for approximately three miles. The Lincoln Park campus is located at Fullerton Avenue at Kenmore Avenue.

## Parking

The lot just north of Byrne hall is not available for parking. Evening on-street parking in much of the area is restricted. If you cannot find on-street parking, use the high-rise building indicated on the map. **We will give you forms at the meeting to avoid parking fees.**

