

OUR NEXT MEETING...

...is at **Lane Technical High School, Chicago**

Thursday

February 19, 2015

6:30 pm to 9:00 pm

Scroll down for directions and map.

AT OUR LAST MEETING...

... the **Tri-Physics meeting at Elmhurst College,**

...after pizza, soda and physics phellowship, we were welcomed by physics chair **Brian Wilhite.**

New teacher bags were given to **Mike Bukas** (Willowbrook High School), **Mike Berry** (Fenton High School), and **Laura Jane Elgsas** (UIC, student teacher at Walter Payton).

Bill Blunk reviewed something he showed us at the last meeting, prism spectacles. He talked the relative quality of spectacles obtained from different sources. We had another chance to use them.



Marshall Ellenstein (retired) has worked with Paul Hewitt and showed us how to get to the collection of 147 movie clips in the HewittDrew-It! collection related to Hewitt's Conceptual Physics text. The web link is <http://phyz.org/hewittdrewit/>. You can also Google conceptualphysics.com and click on Hewitt Drew-It. Another route, through YouTube, is mellenstei. Marshall showed us an excerpt for Hewitt's Ball Toss film. Paul Hewitt will be in Chicago for NSTA meeting in March.

Martha Lietz (Niles West High School) told us there is a change in the arrangement for teachers to obtain CPDUs for attending our meetings. An informal survey showed that some of the teachers attending did want to receive these, so it seems worthwhile to pursue this and she will follow up. She then spoke about the Direct Measurement Videos available from Carleton College (<https://serc.carleton.edu/sp/library/dmvideos/index.html>). She has incorporated some of these into her

AP Physics I course homework on rotational mechanics, such as one on a disk accelerated by a falling weight. In class, she has groups of three students compare and average their analysis of a film. She also mentioned a ladybug rotation problem – I think she was referring to the PhET simulation, Ladybug Revolution (<http://phet.colorado.edu/en/simulation/rotation>).

Jeffrey Tieman (Maine West High School) showed us some techniques he uses for teaching students to use a graphing tool related to Google. Students can incorporate these graphs into lab reports. Jeffrey requires one formal lab report per quarter. He also mentioned another physics simulation resource, SimBucket (<http://www.simbucket.com/>)

Dan Cahill (Grayslake Central High School) told us that Menard’s is a good source of springs, including those that are “open”. These are good for studying Hooke’s law under compression. He devised two ways of compressing these springs. One uses PVC pipe, the other a longer and thinner copper pipe. The spring inside the pipe is fixed at one and a measurable force is applied to the other end. Dan also uses a cart down a ramp to compress a spring; the compressed spring then forces the cart back up the ramp and information about friction can be obtained by observing the maximum position of the cart upon return.



Rich DeCoster (Niles West High School, retired), Used a bathroom toilet plunger (!) to illustrate an astronomical phenomenon. The plunger is placed on the floor with the rod vertical, facing a south-facing window. The position of the shadow cast by the rod is measured as a function of time. It can be seen that the day-to-day time difference between the sun positions on the meridian is not exactly 24 hours, the time for one earth rotation, since the sun’s position relative to the earth changes each day. Rich showed us graphs of the time the sun is on the meridian as a function of the date.

Deb Lojkutz (Joliet West High School) gave us a brief history of ISPP and announced the 2015 winner of the Harald Jensen Award, **Karlene Joseph** from Lane Tech High School. The formal presentation of the award will be made at the Lake Forest College meeting on April 15. We will have the opportunity to congratulate Karlene in person at the February Lane Tech meeting.

Here is the schedule of **FUTURE MEETINGS**, courtesy of Martha Lietz.

ISPP

February 19th (Th)	Lane Tech High School	Karlene Joseph
March 4th (W)	Loyola University	Gordon Ramsey
April 15th (W)	Lake Forest College	Mike Kash
May 4th (M)	Northwestern University	Art Schmidt

Physics Northwest

February 11	Glenbrook North HS	Bob Froehlich
March ?	Harper College	
April ?	Deerfield HS	Diane Riendeau

Link at <http://url.d219.org/ispp> and at ISPP on the Web: <http://www.ispp.info/>.

Reported by John Milton

LANE TECHNICAL HIGH SCHOOL

2501 West Addison Street

Chicago, Illinois 60618 (773)

534-5400 Fax (773) 534-5544

If you are traveling city streets: Addison Street is 3600 North; Western Avenue is 2400 West.

Using the CTA: The Brown line stops at Addison and Ravenswood. Lane Tech is about a mile west at Western; the #152 Addison bus can take those of us not training for the marathon. From the North and South, the #49 Western bus runs right past us.

From the South: Take Lake Shore Drive North and exit at Belmont Avenue. Go west on Belmont (L) until you reach Western. Go north on Western (R). Turn left into Lane's lot after you go through the Roscoe intersection. If you get to Addison you have gone too far. OR Take the Dan Ryan Expressway North (I90). It becomes the Kennedy Expressway after you pass Downtown. Exit the Kennedy at Fullerton/Western (47A). You will drive through the first stoplight to get to Western Avenue. Go north on Western (R). Turn left into Lane's lot after you go through the Roscoe intersection. Make a left turn into the parking lot. If you get to Addison, you have gone too far.

From the Southwest: Take the Stevenson Expressway (I55) North and follow the exit for I90/94 Wisconsin. This will put you on the Dan Ryan Expressway North. Follow the Directions above from here on in.

From the North: Take Lake Shore Drive South, exit on Irving Park Road. Go West on Irving (R) until you reach Western. Go south on Western (L). After you go through the Addison Street intersection and pass the school building, make a right into the Lane lot.

From the Northwest: Take the Edens South to the Kennedy Expressway East. Exit at Addison (L). Go east on Addison until you reach Western Avenue. Go south on Western (R) and turn right into the Lane lot after you pass the school building. OR Take Kennedy eastbound to Addison St. exit. Go eastbound on Addison to Western. Turn south on Western (R) one block to the parking lot entrance. Turn right.

From the West: Take the Eisenhower Expressway (I290) east to the Kennedy. Follow the directions for the Kennedy Expressway West from above.

Directions from I-94: Exit at Addison, go east until Western; turn right (south) at Western.

Directions from Lakeshore Drive: Exit at Irving Park, go west until Western; turn left (south) at Western.

The parking lot entrance is on Western, just north of the Jewel parking lot. Enter the building through door "M" which is the parking lot door. There will be signs from there

