

ISPP REMINDER

September 2013

OUR NEXT MEETING...

...is at
Niles West High School
Monday September 16
6:30 – 9 pm

Scroll down for a map and directions.

AT OUR LAST MEETING...

Our host **Ruth Goemann** and the Museum of Science and Industry welcomed us with a very nice activity using those UV beads available from Educational Innovations (www.teachersource.com). She passed out ziplock bags containing 3 UV beads, a key ring, and a clip. She also had a couple bowls of colorful beads and beads with letters. The idea is that the student can put assorted beads (up to 5 or 6) and the clip on the key ring and attach them to their backpack. I added my initials to mine.

She led a class discussion asking “What questions could we answer with our UV beads?” and at once got 5 or 6 suggestions. I caught a few:

1. How much UV comes through the windows of the car? Does more come through the front than the sides?
2. Do sunglasses or glasses with UV protection really block UV?
3. How much UV is there in the shade? On cloudy days? In the winter?
4. How much UV comes through your clothes?

Ruth passed out a short sheet with an explanation of Ultraviolet light and a few more questions. I really liked her presentation and thought this was a great giveaway. The ring and clip could be replaced with string and paper clip. The beads are inexpensive. Thanks Ruth!

Bob Hurley (Proviso East High School) announced the UIC Quarknet Summer Workshop for teachers (and a couple of students). They will be looking at cosmic rays.

Tom Senior passed his laptop showing a picture of an astronaut looking at the camera through a large (I estimated 10cm diameter) water drop with a small (3cm diameter?) bubble inside. Nice.

Paul Dolan brought a small dumbbell made up of two 1-inch rubber balls on a 6-inch stick. When he dropped it on the table it bounced. Paul dropped it various ways (spinning, not spinning,



vertical, etc.) and looked at the bounce. We thought he might be able to do something with moment of inertia but I didn't hear any really good ideas. We should think about it over the summer and perhaps have an idea or two for Fall. If you think you have something I'm sure if you ask Paul he will lend you a dumbbell at a future meeting.

Roy Coleman passed out a paper from snoops.com describing a speed trap and criticized the description of how speed was measured..**Mike McIntosh** brought an activity he did showing electric fields. Mike took a piece of that high resistance conducting paper that **Martha Lietz** showed a few meetings ago, and painted conducting lines along opposite sides. He connected the lines to a 10V DC power supply and had the students find equipotential lines by using a multimeter probe on the surface and connecting all the 1v, 3v, 5v points.

Mike said the equipotential lines were pretty straight and more or less parallel to stripes (as you would expect). He then had the students draw in the electrical field lines perpendicular to the equipotential lines.

Then Mike had them calculate the electric field strength by dividing the voltage by the distance in cm from the ground painted strip. Surprise! The electric field was fairly constant across the sheet because the higher voltages were further from the ground. Sweet!

We saw a YouTube video film of an "extremely scary prank in Brazil" involving twins and a glass wall pretending to be a mirror. <http://youtu.be/70FdRyn63jI>

The John Rush award this year went to **Mike Kash** who unfortunately couldn't make the meeting. However we had three teachers who hadn't seen the award before. They not only correctly identified the "new menon" but successfully peeled two apples in only three tries. They were awarded the apples and Tom Senior accepted the award for Mike. Tom sent a picture of Mike with his award.

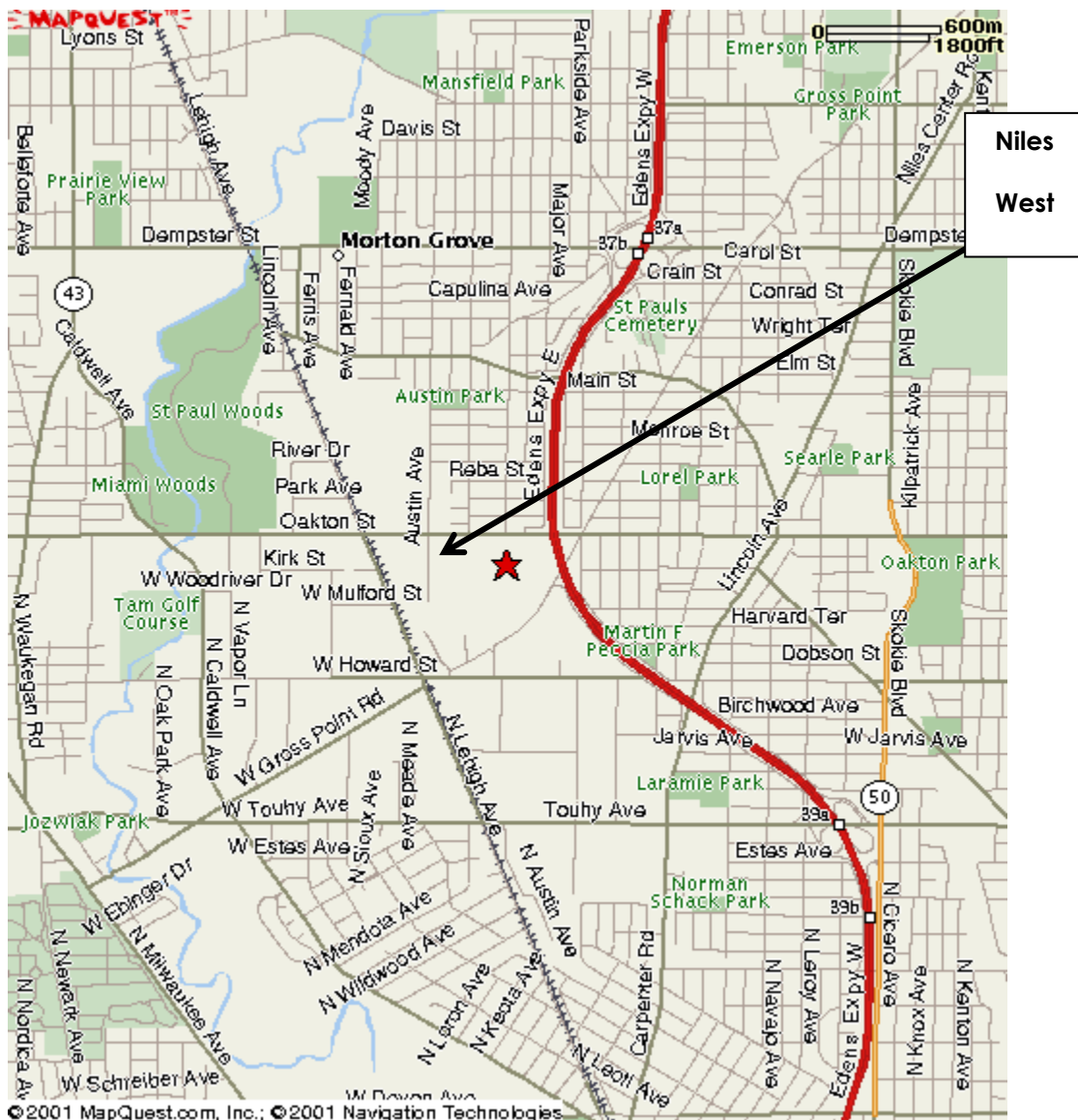
It was a nice meeting. **Ruth** had several posters and assorted giveaways including several sterling motor kits. We all rushed over to the table when the meeting ended and everyone I saw left smiling with their arms full. Thanks again Ruth!

Have a nice summer and we'll see you in the Fall.

Submitted by: Pete Insley



Map to Niles West High School



Directions:

From North or South: Take I-94 to Dempster Street, exit going east. Go to the second light stop light (Gross Point Rd.) and turn right. Take Gross Point Road south to Oakton, and turn right onto Oakton. The entrance to the school is the first left after the bridge over the highway. **Due to school security, you must enter through the auditorium entrance in front of the building. Signs will guide you to the appropriate room(s).**

From West: Take Touhy east from I-294 to Harlem Ave. Turn left. Take Harlem north to Oakton. Turn right. Take Oakton east to the high school, and follow the directions above.

Future Meetings

September	Niles West	Monday 9/16
October	IIT	????
November (none)		-----
December	DePaul	Tuesday 12/3
January	Elmhurst	Wednesday 1/15
February	NEIU	Thursday 2/20
March	Lane Tech	?????
April	Lake Forest College	Wednesday 4/9
May	Northwestern	Monday 5/5
June	MSI	Tuesday 6/3

CSAAPT will meet on Saturday, November 16th at Oakton Community College.