2013 Western New York Physics Olympics

It is time for the Western New York Physics Teachers Alliance **Physics Olympics** for middle and high school students! This year will be our seventh annual event and will be held on Saturday, November 23 in the Science Building at Buffalo State College.

Our Physics Olympics events involve construction, problem solving, creativity, quick thinking, teamwork and some luck. We run this event with volunteer teachers and we keep the intensity low and the atmosphere friendly. It is best if the students form teams of 2-5, but we can work with individual students also. Each team will complete three different Physics Olympics events, rotating from one event to another. Here is an approximate schedule for the day:

8:30-8:50	Registration, Foyer of the Science Building.
8:50-9:45	Event 1
9:55-10:50	Event 2
11:00-11:55	Event 3
12:00-12:30	Pizza lunch
12:30-1:15	Demonstration show
1:15-1:30	Awards

The events do not require any preparation ahead of time, but it is a good idea to have your students aware of what Physics Olympics events are like (especially the timing & working quickly). If you have never done Physics Olympics events with your students, it is a great way to add some fun and friendly competition to your classroom. Examples of events from other campuses can be found with a quick web search. Samples of the events we have used in the past years can be found at http://physicsed.buffalostate.edu/WNYPTA/meetings/ Check the 2006-12 November meetings for archive events and pictures from the past years. Some details of one event are given below so you can have your students practice. The other two events will not be known ahead of time, but I can give some clues:

Event 1: Paper airplane contest: The students will build two planes, one for longest distance and one for longest time aloft. The planes will be made from one sheet of paper provided. Scissors and a limited amount of tape will be provided. Your student should practice making planes before the event.

- The distance throw will be made from level ground. Balling up the paper and throwing is not allowed – you must have a plane that flies and the judges will determine if you are within the spirit of the content.
- The plane thrown for longest time will be launched form a third floor balcony. The time will be measured from release to when the plane stops flying, even if it doesn't reach the floor.

Event 2: Egg Event. This year's traditional egg event will be exciting. Be sure to study up on impulse!

Event 3: Construction Event. Students will build a structure that will be tested for strength.

Middle school and high school teams are invited to participate. The MS & HS scores are tracked and calculated separately. All students will receive a T-shirt and certificate commemorating their participation in the Physics Olympics.

Because we are limited in space, each school is limited to three teams (up to 12 students). Most teachers do not have to turn away students, but if you find that you have many students interested, we suggest that you have your own local event and invite the winning teams to Buffalo State. If you have only one or two students who want to participate, we can combine them with other singles to make a team. Many teachers have students find their own transportation, but some have arranged for school transport. We suggest an arrival time of 8:00 and a departure time of 1:30. Direction to Buffalo State and campus maps can be found at http://www.buffalostate.edu/directions.xml Use parking lots R and S-1.

Registration: To register please email the following information to Dave Henry at henryd@buffalostate.edu by November 8, 2013.

1. School Name
2. Grade level (high school or middle school)
3. Number of students you *expect* will participate. We do not need their names at this time, we will officially register the teams on the morning of the event.
4. Number of adults/teachers who are attending and willing to help out with running the events.
5. When I receive your registration, I will send you the photo release form.