

## WELCOME!

We look forward to your school's participation at the NJAAPT sponsored "NJ Physics Olympics" to be held on Saturday, January 14<sup>h</sup>, 2012 at Monmouth Regional High School. The competition is a lot of fun and your students will meet, share experiences, and compete with other students from various parts of New Jersey.

In order to participate you must complete the attached **registration form** and send your check within the deadline prescribed. Rules & directions can be obtained by visiting the NJAAPT web site @ [www.njaapt.org](http://www.njaapt.org). You can also request that your team be mailed the complete rules for the competition and directions to the event. The **fee of \$35.00 per team** helps defray the cost of postage, supplies, trophies and donuts. IOU's will be accepted in the case where school checks cannot be sent in time. No purchase orders can be accepted. The fee will be reduced to **\$25.00 per team** if the team registers by **December 15, 2011**. Each team may have up to six members.

Each high school must have **at least one faculty member** accompanying the team who will be asked to help judge one of the events. More than one faculty member will be welcomed. **We could really use the help.**

On the day of the Olympics, plan on arriving for the final registration between 8:00 am and 9:00 am. **The first event begins at 9:00am.** The day's activities should **conclude around 2:30pm.**

You may bring your own **box lunches**. The cafeteria will not be open. Morning refreshments will be served.

Since there are a maximum number of teams that we will be able to handle, we may have to ask for a multiple team school to only send one team. Should this happen we will notify you by January 7, 2012. Fees for eliminated teams will be refunded.

## EVENT GOALS

**PLEASE NOTE: *The following are only brief descriptions of each event.***

***Full rules, competition scoring procedures, and the scoring formula can be obtained at [www.NJAAPT.org](http://www.NJAAPT.org).***

- **FERMI QUESTION**- To estimate the order of magnitude of a quantity that is difficult or impossible to measure.
- **SLOW BICYCLE RACE**- To ride a two wheeled bicycle in the longest interval of time.
- **THE HOOKED CARTESIAN DIVER**-To build a Cartesian diver that will retrieve sinkers in the least time.
- **BARGE BUILDING**- To build a barge that will support the greatest mass.
- **ZERO IMPACT VEHICLE**- To design a vehicle that will move as close as possible to a wall without touching it.
- **STRAW LEVER ARM**- To build a lever arm of minimal mass that will support a 1kg mass.

Updates to the rules as well as questions and answers concerning the rules will be posted on the NJAAPT web site at

[www.njaapt.org](http://www.njaapt.org).

It is your responsibility to check the web site so that your team is updated about changes and clarifications to the rules!

## Awards

### **Six First Place Trophies**

One for the highest score in each of the six events.

### **One Third Place Overall Trophy**

To the team with the third highest overall score in all six events.

### **One Second Place Overall Trophy**

To the team with the second highest overall score in all six events.

### **One First Place Overall Trophy**

To the team with the highest overall score in all six events.

## **The NJ PHYSICS OLYMPICS SILVER SERIAL BOWL**

**The first place trophy team will also receive the NJ Physics Olympics Serial Bowl. The name of the winning team's school will be engraved on the bowl and that school will proudly display it in their school's trophy case until the 2013 Physics Olympics.**

## REGISTRATION FORM

To register, complete and return this form with a \$35.00 check (if registering before December 15, 2011 the fee is \$25) for each team entered (6 members per team). Rules & directions can be obtained by visiting the NJAAPT web site at [www.njaapt.org](http://www.njaapt.org). You can also request that your team be mailed the rules for the competition and directions to the event.

School Name: \_\_\_\_\_

School Address: \_\_\_\_\_

Teacher's Name(s): \_\_\_\_\_

School Phone: \_\_\_\_\_

Home Phone: \_\_\_\_\_

FAX: \_\_\_\_\_

EMAIL: \_\_\_\_\_

Number of Teams: \_\_\_\_\_

Total Value of check: \_\_\_\_\_

Do you want a copy of the rules & directions mailed to you (you may obtain them by visiting the NJAAPT web site at [www.njaapt.org](http://www.njaapt.org))?

YES      NO

Make checks payable to the "NJAAPT" and include \$35.00 for each team entered. Send registration form and check by **January 1, 2012** to:

**John Valente**  
**M.A.S.T.**  
**BLDG. 305**  
**Sandy Hook, NJ 07732**

## FOR FURTHER INFO

If you need further information on the NJ Physics Olympics, please contact John Valente in one of the following ways:

**MAIL:** M.A.S.T.  
BLDG. 305  
Sandy Hook, NJ 07732

**PHONE:** (732) 291- 0995

**EMAIL:**  
[John\\_Valente@mast.mcvsd.org](mailto:John_Valente@mast.mcvsd.org)

## COMMITTEE

Dave Bandel  
Jessie Blair  
David Maiullo  
Ray Polomski  
John Valente

**The  
New Jersey Section  
of the  
AMERICAN  
ASSOCIATION  
OF  
PHYSICS TEACHERS**

Invites you and your school to the

**2012 NEW JERSEY  
PHYSICS OLYMPICS**

on

**Saturday  
January 14<sup>th</sup>, 2012**

at

**Monmouth Regional  
High School  
Tinton Falls  
New Jersey**

Outline of this year's events with registration form and deadlines are inside.