

# *World Year of Physics- 2005*



## Einstein in the 21<sup>st</sup> Century

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- **What is the WYP?**

*Celebration! Public Awareness!*

- **Is anybody paying attention?**

*International Union of Pure and Applied Physics (issued initial declaration)*

*United Nations Resolution-  
6/10/04*

*U.S. House of Representatives-  
House Concurrent Resolution 301  
7/7/04*

- **Why 2005?**

*100<sup>th</sup> Anniversary of Einstein's  
“Miraculous Year” 1905 seeing  
production of papers on-*

*Photoelectric Effect  
(light consists of energy  
quanta) **March***

*Brownian Motion  
(kinetic theory) **May***

*Special Relativity  
(revolutionary new view of  
space and time) **June***

*Mass/Energy  
( $E=mc^2$ ) **September***

- **Why is WYP important?**

*Public awareness of physics needs improvement.*

*Physics literacy of students needs improvement.*

*Physics is the foundation of the sciences and engineering- so it is crucial for students to learn physics, whether they major in science or not.*

# • What can I do?

*Some ideas from physics2005.org:*

- **Hold a physics day**

Focus your World Year of Physics activities on a celebration of physics day. Have an Einstein look-alike contest, do some large-scale experiments with your classes (water rockets for everybody!), have a guest speaker visit, the possibilities are limited only by your imagination...

- **Family science events**

Bring parents to your school and have them experiment along with your students. Your students will love discovering that they can teach their parents a thing or two about science. Have parents compete against students in a physics-based activity.

- **Start a science club**

Have you always wondered about starting a science club? Why not use the World Year of Physics as the impetus to begin. We'll provide some resources with suggestions for running a science club in lunch breaks or after school.

- **Run a science Olympics**

Fun and friendly competition might bring out the best in your students. We have suggestions for a series of events that will be so much fun, students might even forget they are learning!

- **Host a scientist-in-residence**

Invite a scientist into your school for a week. Have them contribute to lessons, and provide your students with tales of what physicists really get up to.

- **Film night**

Arrange a viewing of your favorite physics-related movie. You could hold it in a community or school hall, or maybe a local organization will let you use their space. Why not invite a local physicist to introduce the film and point out some of the physics in the film the audience is about to see? You don't have to restrict yourself to documentaries – you might like to pick science fiction, or maybe a drama in which scientists or science play an important role.

- **Physics Demo Day(s)**

Devote a class (or perhaps parts of classes over several days) to physics demos.

- **Visit!**

Visit Union for a demo show (contact Dr. Kyle Hathcox 731-661-5249 or [khathcox@uu.edu](mailto:khathcox@uu.edu)) or have a physicist visit for a talk or a demo show (again, contact Dr. Hathcox.)

- **Science Trivia/Einstein Quotes**

Post interesting science trivia or Einstein quotes each day in the hall, in your class, or read them during morning announcements.

- **Let's Celebrate Physics!**

(quick simple demos for younger- and older!- classes )

1. Egg Drop

4. Ping Pong Funnel Surprise

7. Furry Charge

2. Spinning Water

5. Balloon in Bottle

8. Wavy Spring

3. Frictional Phonebook

6. Tuning Fork

9. Alka Seltzer Fun



***“One thing I have learned in a long life: that science, measured against reality, is primitive and childlike- and yet it is the most precious thing we have.”- Einstein***

***[www.physics2005.org](http://www.physics2005.org)***

***Thank You!***

