#### L. R. INGERSOLL PHYSICS MUSEUM



The L.R. Ingersoll Museum is a free, public, hands-on, physics museum located on the University of Wisconsin - Madison campus in <u>Chamberlin</u> Hall.

Sir Isaac Newton

Our exhibits focus on experiments demonstrating basic physical concepts ranging from mechanics to modern physics. Along the corridors we have historical instruments and photos of the Nobel Prize Winners in Physics from 1901- 1993 on display.

The Physics Museum was started by Professors Snow and Ingersoll in 1917, one of the first such museums in this country. Over the years many exhibits designed by members of the Department of Physics faculty, and are built in the department shops, have been progressively added. The museum is open to visitors from 8:00 A.M. until 4:00 P.M.

#### Monday through Friday.

Please send your questions, comments, or suggestions to either Steve Narf at srnarf@wisc.edu or to Ugo Camerini at camerini@wisc.edu.

If you wish to schedule a guided tour of the museum, please contact Steve Narf at (608) 262-3898 or srnarf@wisc.edu.



# L. R. INGERSOLL PHYSICS MUSEUM



CHABMERLIN HALL 1150 UNIVERSITY AVENUE MADISON, WISCONSIN 53706 http://www.physics.wisc.edu/museum

Visit our webpage http://www.physics.wisc.edu/museum

# **COME IN AND PLAY!**

# Mechanics



In the mechanics section, you can observe the conservation of momentum and energy by playing with the **Newton's Cradle**. You can feel the conservation of angular momentum by taking a ride on the

Student in the Spinning Platform.

of angular momentum by taking a ride on the **Spinning Platform**. There is also a small

model of **Foucault's Pendulum**, which is an experiment to demonstrate the rotation of the Earth. Even Einstein's general theory of relativity, which describes

g r a v i t y and black holes, can beillustrated by the analogy of the **Grav**ity **Pit**.



Students observe coins falling in the Gravity Pit

#### **Computer-Based Physics**

In our computers you can see graphic displays of consonant sounds on the Lissajous Curves Demonstration and change their parameters. You



Students sing in the Your Voice Demonstration

can play with different programs of the **Chaos Demonstrations**, and see the frequency of your voice in **Your Voice**.



## Electricity & Magnetism

You can generate electricity by rotating the wheel of the **Dynamo** and the **AC and DC Gen**-

Students play with electricity and magnetism

AC and DC Generator. Discover different connec-

tions you can make in the **Circuit Puzzle**. Feel the magnetism force of the **Induced Current Coil**.

## Light & Optics



Students observe their images in the mirrors

Observe the difference in your image in a **Plane, Convex, and Concave Mirror**. Try to discover the secret of the **Hologram** and the **Mystery Window**. Observe the difference between mixing colored lights and mixing colored pigments in the **Additive Color Mixing** and the **Subtractive Color Mixing Demonstrations**. Observe



Student manipulates the Plasma Tube with magnets

the spectra of different gases and of incandescent white light on the Light and Atomic Spectra.

### **Modern Physics**

The application of a magnetic field induces a kaleidoscopic array of colors in the **Plasma Tube**.