

Festival of Physics at COSI Columbus in partnership with The Ohio State University



Saturday, October 20th, 10AM to 5PM
Sunday, October 21st, Noon to 6PM

Try out fun physics activities, meet leading researchers, and join a superconductive square dance!

What is a magnet and how does it work? Why is water wet, and steel so tough? Individual atoms aren't wet, hard, or shiny, so where do these properties come from?

Find out at COSI during the Festival of Physics! Activities are included in the price of COSI admission.

- World-renowned professors from The Ohio State University, plus COSI's own science faculty, will show you cutting-edge discoveries in magnetism, superconductivity, cold atoms, and superfluids.
- Engaging lectures, unique hands-on activities, and much more, are included with the price of COSI admission during the Festival.
- Teachers get in free with a school ID at COSI!

For more information about the Festival of Physics or COSI hours and rates, please visit www.cosi.org or call 614.228.COSI (2674).



**EXPLORE
SCIENCE.
DISCOVER
FUN!**



COSI COLUMBUS

333 West Broad Street | Columbus, OH 43215 | 614.228.COSI (2674) | www.cosi.org



DEPARTMENT of
Physics

Schedule of Events

Saturday, October 20, 2007

10:00 am to 4:00 pm

Science a la Cart!

Fun physics activities presented by OSU researchers and COSI teachers throughout the day! Learn what a conductor is, find out what happens when a live wire is dipped in super-cold liquid nitrogen, and send a ring shooting skyward with the power of magnetic repulsion!

Location: COSI Atrium

11:00 am

Presentation: *The Revolutionary BCS Theory of Superconductivity*, by OSU Professor Tom Lemberger

Discovered in 1911, superconductivity was finally explained by physicists at the University of Illinois 46 years later! Come to explore superconductivity that appears when special compounds are cooled in liquid nitrogen.

Location: Traveling Exhibit Gallery

1:00 pm

Presentation: *The Science of Ice Cream* by OSU Professor Gönül Kaletunç
Who says physics can't be tasty? Learn how ice cream's complex properties emerge from its simple ingredients.

Location: Traveling Exhibit Gallery

3:00 pm

Presentation: *Ultra Cold Atoms* by OSU Professor Mohit Randeria

Enter the realm of quantum mechanics and learn how atoms organize themselves when it gets very, very cold. Hear about new developments in atom lasers and atomic clocks.

Location: Traveling Exhibit Gallery

4:00 pm

Cooper Pairs Square Dance

Join us to celebrate the 50th anniversary of the BCS Theory of Superconductivity with a superconductive square dance!

Location: COSI Atrium

Sunday, October 21, 2007

Noon to 5:00 pm

Science a la Cart!

Fun physics activities presented by OSU researchers and COSI teachers throughout the day! Learn what a conductor is, find out what happens when a live wire is dipped in super-cold liquid nitrogen, and send a ring shooting skyward with the power of magnetic repulsion!

Location: COSI Atrium

1:00 pm

Presentation: *Phase Transitions in Magnets* by OSU Professor Chris Hammel

Explore the emergence of magnetism in a piece of iron as the temperature is lowered. Learn about nanomagnets and novel imaging techniques.

Location: Traveling Exhibit Gallery

2:30 pm

Presentation: *The Science of Ice Cream* by OSU Professor Gönül Kaletunç

Who says physics can't be tasty? Learn how ice cream's complex properties emerge from its simple ingredients.

Location: Traveling Exhibit Gallery

4:00 pm

Presentation: *High Temperature Superconductivity* by OSU Professor Nandini Trivedi

Learn how the discovery of superconductivity in strange ceramic materials in 1986 shook the foundations of condensed matter physics and opened up new frontiers of exploration.

Location: Traveling Exhibit Gallery

5:00 pm

Cooper Pairs Square Dance

Join us to celebrate the 50th anniversary of the BCS Theory of Superconductivity with a superconductive square dance!

Location: COSI Atrium