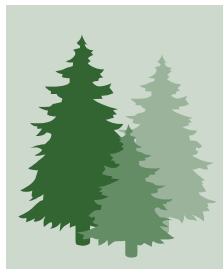


Physics Matters

Summer research opportunities for 2005 on and off-campus

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Applications for Biology, Chemistry and Physics Department Offices for summer research are online this year at <http://www.stolaf.edu/people/ceumb/research.html>

The due date is **February 18!** If you have questions, it's best to talk with a research director.

As an alternative to the St. Olaf summer research, here are other off-campus options for you to consider. *(There are more options in the "Summer Research" folder in SC110 and check out the Physics homepage.)*

U. of California, Los Angeles REU in Physics and Astronomy. <http://reu.physics.ucla.edu>

U. of California, San Diego.
<http://www-physics.ucsd.edu/students/reu>

U of MN, Materials Research Science & Engineering Center
<http://www.mrsec.umn.edu/>

U. of Wyoming, REU in Astronomy Research
<http://faraday.uwyo.edu/> (follow instructions for SURAP/REU)

U. of Florida, REU in Physics
<http://www.phys.ufl.edu/REU/>

National Nanotechnology Infrastructure Network
<http://www.nnin.org>

U. of Oregon, REU in Physics
<http://materialscience.uoregon.edu/undergraduate/reu/reu.htm>

National Undergraduate Fellowship Program in Plasma Physics and Fusion Energy Sciences
<http://science-education.pppl.gov/Nuf/Index.html>

U. of Rhode Island, SURFO (Oceanography)
<http://espo.gso.uri.edu/~surfo>

William & Mary, REU in Physics
<http://www.wm.edu/physics/undergradresearch.php>

U. of Alabama, REU in Materials Science and Engineering
<http://mint.ua.edu>

Los Alamos Summer School in Physics
<http://www.phys.unm.edu/LASS/>

Texas A & M U., REU in Nuclear Physics
<http://cyclotron.tamu.edu/reu/>

U. of Texas McDonald Observatory, REU in Astronomy & Astrophysics <http://www.as.utexas.edu/reu/>

North Dakota State U., Coatings & Polymeric Materials
<http://pc.ndsu.nodak.edu/>

U. of Notre Dame, REU Program
<http://www.physics.nd.edu/reu/>

U. of Nevada, Las Vegas, REU in Physics
<http://www.physics.unlv.edu/reu/>

Penn State, REU in Physics
www.phys.psu.edu/undergraduate/research/reu/

SRI International
<http://www.sri.com/psd/reu/>

Coe College, REU in Physics
<http://www.public.coe.edu/departments/Chemistry/reu/reu.shtml>

U. of Maryland, REU in Physics
<http://www.ireap.umd.edu/TREND/>

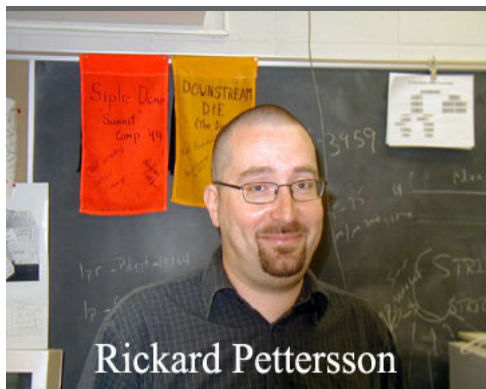
Michigan State U., REU in Physics & Astronomy
<http://www.pa.msu.edu/reu/>

Hope College, REU in Physics & Engineering
<http://www.hope.edu/research>

Indiana U., REU in Astronomy
<http://www.astro.indiana.edu/reu.shtml>

U. of Michigan, REU in Physics
<http://www.physics.lsa.umich.edu/academics/research/reu.asp>

Rickard Pettersson joins the Physics Department from Sweden



Rickard Pettersson

Rickard Pettersson joined the St. Olaf faculty in September 2004 as an assistant professor in the physics department and will teach

Introduction to Environmental Studies during the spring semester.

Besides his teaching he is involved with a research project about ice-stream dynamics in West Antarctica.

Rickard Pettersson did his undergraduate studies at Stockholm University, Sweden and graduated in 1997 with a major in Physical Geography and

earned his PhD in glaciology at Stockholm University in June 2004. His other research interests are: properties of the west Antarctic ice streams, thermo- and flow dynamics of polythermal valley glaciers and the connection between glacier mass balance and climate.

Outside the office he likes such widely different things as photography and soccer.

Newest tenure-track faculty member, Brian Borovsky '94

Next fall we will welcome Dr. Brian Borovsky as a new member of the Physics Department faculty. Brian is a 1994 graduate of St. Olaf who earned his Ph. D. at the University of Minnesota in 1998. He taught at St. Olaf for a semester in between finishing graduate school and starting a postdoctoral research position at the University of North Carolina.

Brian comes to us from Grinnell College, where he has been teaching physics since 2001. Brian's research is in the field of surface physics and he is currently doing experiments to study friction at the

atomic and molecular level.

Brian will be setting up a lab and looking for students to help him continue that work at St. Olaf. We are looking forward to having him join us!



Physics News!

Holy sonar technology, Batman

What can the Navy and NASA learn by taking a close look at a bat's ear? Maybe the secrets to new shapes for antennas. European researchers have created detailed 3-D maps of the shapes and crevices of bat ears created by millions of years of evolution to help bats find their way.



Saturn's Outer Rings May Be Eroding

The planet's E ring could disappear within 100 million years, based on images captured by the Cassini spacecraft.

ST. OLAF COLLEGE

Physics Department
Science Center, First Floor, #112
1520 St. Olaf Avenue
Northfield, MN 55057

Phone: 507-646-3120
Fax: 507-646-3968
Email: russell@stolaf.edu