Sanford Underground Science and Engineering Laboratory

at Homestake

Education & Outreach Spotlight

March 2008

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Welcome

Welcome to the first Education and Outreach (E&O) Spotlight! We are excited to share information about a few upcoming educational events and opportunities. We hope to keep you updated on a regular basis, but don't forget to visit the Sanford Underground Science and Engineering Laboratory at Homestake site <u>http://www.sanfordlaboratoryathomestake.org</u> once in a while for the most up to date information.

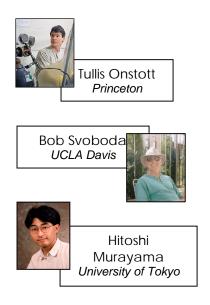
DUSEL April Meeting

The Deep Underground Science and Engineering Laboratory (DUSEL) Scientific Collaboration is planning a major workshop for the full week of April 21. Hosted by the Sanford Underground Science and Engineering Lab at Homestake, this summit will help scientists from across the country (and around the world) develop proposals for the initial suite of experiments to be located at DUSEL.

Wednesday's session (April 23) will focus on Education & Outreach. Participants will receive an update about plans thus far and will be invited to provide guidance on future directions. Through both plenary and breakout sessions, attendees will learn from one another and from outside experts about principles of high quality E&O and about lessons learned through similar efforts elsewhere, and help set the course for the future.

On Thursday, April 24, a small working group will focus on laboratory-wide infrastructural requirements for E&O. This work will inform the education section of the Preliminary Design Report (PDR), which is planned for submission to NSF in the spring of 2009.

A schedule for the workshop along with registration information is located at <u>http://homestake.sdsmt.edu/April_20-</u>26/meeting.htm



Science Lecture Series Launched

The Lecture Series on Underground Science will provide an opportunity for the public to hear distinguished scientists share their work and most recent discoveries. These lectures are for general audiences and students, and they will be widely publicized to schools, colleges and universities and community members.

Lectures will be held in Lead, Spearfish and Rapid City. Talks begin at 7:00 p.m. and are free to the public.

- April 22 TC Onstott (Lead HS Auditorium)
- April 24 Bob Svoboda (BHSU Jacket Legacy Room)
- April 25 Hitoshi Murayama (SDSM&T)

For more information, or to download posters, visit http://www.camse.org/underground/lecture_series.php

Going Underground to Study the Universe

Shine a light on the future. Sanford Underground Science and Engineering Laboratory at Homestake will help answer some of the most important outstanding questions about the cosmos!

Why go underground to study the universe? Find out for yourself at PAN (Physics of Atomic Nuclei) Underground!

This workshop is designed for high school chemistry and physics teachers and will be held at the University of South Dakota in Vermillion June 9-13, 2008.

Limited financial assistance will be available to offset tuition, room and board.

To register, or find more information, visit http://www.nsd.lbl.gov/pan_underground

The Ross head frame provides access to the 4850 ft. level of the mine.





The Physics of Radiation

Can what you don't know make you glow? Science teachers of grades 7-12 are invited to join Dr. Andy Johnson at the Sanford Underground Laboratory on the old Homestake mine site in Lead, SD for a one week course on the Physics of Radiation, July 7-12. Learn the fundamentals of radiation what it is, where it comes from, and how it affects people. This course will provide inquiry-based learning experiences for developing a basic understanding of this timely topic. Participants will learn effective approaches to dealing with students' ideas.

To sign up for this workshop, or to get more information contact Susan Pisani, Center for the Advancement of Mathematics and Science Education <u>SusanPisani@bhsu.edu</u>



Dr. Davis shared the Nobel Prize in Physics in 2002 for his solar neutrinos research at this laboratory in the Homestake Mine.

South Dakota Public Broadcasting and NOVA are headed to the Sanford Underground Laboratory at Homestake

A public outreach day will be held at the Sanford Underground Laboratory on Saturday, July 12, 2008. This event has been initiated by South Dakota Public Broadcasting (SDPB) in collaboration with the NOVA science series, and it marks the one-year anniversary of NSF's selection of Homestake as the preferred site for a deep underground lab (July 10, 2007). Scientists, educators, and lab officials will offer public lectures. One of South Dakota's Science on the Move mobile science labs will feature a cosmic radiation demonstration. NOVA will share segments of The Ghost Particle, which tells the story of the hunt for solar neutrinos and highlights the Nobel Prizewinning experiment of Dr. Ray Davis in the Homestake Gold Mine.



CAMSE seeks a visionary leader in science education to help direct this work and maximize learning opportunities for K-12 students and teachers, university students and faculty, and the general public.



Central to the Sanford Underground Science and Engineering Laboratory and to the Homestake-DUSEL initiative are goals of increasing public understanding and helping to prepare the next generation of scientists and engineers. South Dakota's Center for the Advancement of Mathematics and Science Education, a statewide Center of Excellence located at Black Hills State University, is coordinating early education and outreach activities at Sanford Lab and is helping to develop the longer term plan for federal consideration. CAMSE seeks a visionary leader in science education to help direct this work and maximize learning opportunities for K-12 students and teachers, university students and faculty, and the general public. Required gualifications include a doctorate in science, science education, or related field, teaching experience, and evidence of leadership. Academic rank and title at Black Hills State University are possible, depending on interest and gualifications. Applications received by April 11, 2008 will receive full consideration. For additional information and to submit an application, candidates should visit https://yourfuture.sdbor.edu and search for position 0001414.

Until next time Keep up to date Feel free to download the PDF and print copies for your friends.

http://www.sanfordlaboratoryathomestake.org http://www.camse.org/underground/news.php