

## Kavli Institute Inauguration a Memorable Event

By Tom Mead

On the afternoon of Monday, March 17, distinguished guests and a large crowd of members of the SLAC Community witnessed the inauguration of the Kavli Institute for Particle Astrophysics and Cosmology at Stanford University and SLAC. Among the speakers was Roger Blandford, who will take the reins in October as the Institute's Director.

Founded by physicist and philanthropist Fred Kavli, the Kavli Foundation is dedicated to the goals of advancing science for the benefit of humanity and promoting increased public understanding of and support for scientists and their work.

(See KAVLI, page 2)



Persis Drell (RD) presents Kavli with an aerial view of the proposed site.

Photo by Tom Mead

## DOE Security Condition Levels Explained

By Rick Yeager

Following the Monday, March 17 upgrade of the national threat condition from Yellow to Orange by the Department of Homeland Security, the Department of Energy (DOE) raised the Security Condition (SECON) status of their facilities from "SECON-3 modified" to "SECON-2."

SECON Level 2 is an elevated security posture for DOE, and reflects a heightened need for vigilance in light of recent global events.

DOE SECON status corresponds with the National alert levels as follows:

**National Level Red/SECON Level 1:** Severe risk of terrorist attack or, an attack is in progress.

**National Level Orange/SECON Level 2:** High risk of terrorist attack.

**National Level Yellow/SECON Level 3:** Significant or elevated risk of terrorist attack.

**National Level Blue/SECON Level 4:** Guarded or general risk of terrorist attack.

**National Level Green/SECON Level 5:** Low risk of terrorist attack.

DOE Headquarters in Washington, D.C. directs the Laboratory to assume one of the above levels, or to assume a modified level such as SECON Level 3+, the level that we were at before the recent upgrade. At each of these levels, SLAC's Safeguards and Security takes a series of enhanced security actions.

The most visible changes begin at SECON Level 2 and involve checking the photo I.D. for all persons in a vehicle and visually checking the cargo area of all delivery vehicles.

At SECON Level 1, the Laboratory would be closed to public access so that tours and public events would be cancelled. SECON Level 1 would be similar to the actions that took place at SLAC immediately following the September 2001 attacks

(See SECURITY, page 2)

## Bubble Chamber Glass Finds New Home

By Joni White

SLAC's newest sculpture was unveiled on March 17, dedicated by Fred Kavli and commemorating the site of the future Kavli Institute. The sculpture was made entirely onsite, mainly from recycled materials including a 40-inch glass window from a bubble chamber used at SLAC from the 1960s through the 1980s.

The bubble chamber glass weighs 1078 pounds, and was used to separate the picture taking optics from the liquid hydrogen inside the chamber. When you look through the glass, you can see small x's, called fiducials, still etched into the surface of the glass. These fiducials were used for 3-dimensional stereoscopic reconstruction, and enabled accurate tracking of particles.

The glass was donated to SLAC by the estate of Joel Jensen. Jensen had worked on several bubble chamber crews. Ron Badger (EFD) was given custody of the glass by Jensen's estate, and offered it to the SLAC Art Committee for use as display. With the Inauguration of a new building for Particle Astrophysics, Neil Calder (Director of Communications and head of the SLAC Art Committee) felt creating a sculpture would be a good way to ensure the glass would be seen and enjoyed by many people and to connect our history to our future.

It was really a collaborative effort creating the sculpture, and many thanks go to our mechanical designer, Catherine Carr, as well as all who helped from MFD and SEM. We couldn't have done it without you!



Fred Kavli unveils the sculpture at the Inauguration event

Photo by Kathy Bellevin

## Exploratorium to Honor Pief Panofsky

By Shawna Williams

Pief Panofsky doesn't know much about museums, he claims, but he knows what he likes. So when his friend Frank Oppenheimer came to his office in the mid-60's with an idea for a hands-on science museum, Panofsky did what he could to help him. Now one of the most famous science museums in the world, Oppenheimer's Exploratorium in San Francisco will thank Panofsky later this month with a Lifetime Achievement Award.

"Pief's achievements have been exemplary as a scientist in the field of high energy physics and as a humanitarian," says Dr. Goéry Delacôte, the Exploratorium's Director since Oppenheimer's death in 1985. "As a lifetime Exploratorium Board member, Pief has also played a leadership role in this institution since its founding."

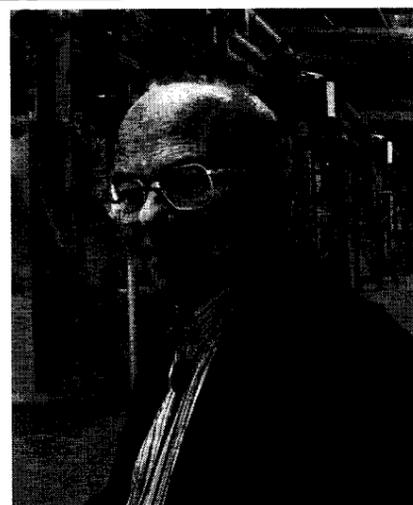
Physicists Oppenheimer and Panofsky met soon after World War II when they worked together on a linear accelerator in Berkeley. Panofsky later moved to SLAC, and Oppenheimer became a rancher and teacher in Colorado after

being blacklisted by the House un-American Activities Committee. "Frank was a very humble, soft-spoken fellow, and a capable experimental physicist, but public education was really his bag, it was his mission," Panofsky remembers.

His teaching experience convinced Oppenheimer that hands-on exploration was the best way to learn science, and he returned to California to start a museum based on this idea. Panofsky supported Oppenheimer, helping choose the Palace of Fine Arts in San Francisco as the location. SLAC sometimes loaned equipment or guest speakers to the museum, and helped with exhibit design.

Oppenheimer's goal for the museum was to bring visitors' perceptions closer to scientific reality, Panofsky explains. "So originally he was going to call it the Perceptorium, but then he got convinced that nobody could figure out what that means."

"At most other science museums the exhibits are sort of under glass. I mean, here's the exhibit and here's the visitor and you push a button and something happens," Panofsky says.



Pief Panofsky, Director Emeritus

Photo by Peter Ginter

"At the Exploratorium there's much more immediacy between what you experience and what really goes on. There's no glass wall between you and the exhibits."

Panofsky will receive his award at the Exploratorium's 26th Annual Awards Dinner on Wednesday, April 30. For more information, call (415) 561-0322.

For more information on the Exploratorium, see: [http://www.exploratorium.edu/about/about\\_explo.html](http://www.exploratorium.edu/about/about_explo.html)

For more information on Panofsky, see: <http://www.slac.stanford.edu/grp/do/people/pief.html>

## Save Our Science Days and HEP Operations Schedule to Change

By Lee Lyon

On March 11, I sent all SLAC employees a memo to clarify, add detail and answer questions about the SLAC Cost Reduction Measures. I'd like to take this opportunity to reiterate the most salient points of that and previous memos regarding this matter.

As Greg Loew wrote in his memo of February 27, while the proposed FY04 HEP budget was about \$7M higher than this year's budget, it still would not be sufficient to run our HEP program as planned next year. We have now been able to evaluate all the new budget information, and, in order to optimize our science program and avoid any budget-driven involuntary layoffs, we have had to make some relatively minor changes to the assumptions we had made and to the plans you had generously accepted. While chief among those changes is a calendar shift of the scheduled leave-without-pay days, there are also a number of other details to be addressed.

### Save Our Science Days Changed to Week of June 30 - July 4, 2003

All SLAC HEP staff will have to take four days as leave without pay during the week of June 30 through July 4. That is four days of leave without pay from June 30 through July 3 and a paid holiday on July 4. Some staff with unusual schedules may have to work out the exact arrangements with their supervisors. This change was made in order to support our science program and to schedule the days without pay at what may be a more desirable time for many staff. I hope this change causes no undue inconvenience for you.

Those four days will be considered a temporary layoff. While staff will continue to accrue sick and vacation leave, and full contributions will be made to their health and welfare plans, they cannot use vacation, personal time off (PTO), or birthday holidays to cover the four shutdown days. Contributions to retirement plans are based on eligible earnings for that pay period and therefore will be reduced slightly.

### Earned Vacation Must Be Taken

In addition to the changes addressed above, we also have to ask all HEP staff to use all the vacation they earn during this fiscal year. Put another way, your vacation balance

on September 30, 2003, should be no more than it was on October 1, 2002. Check your pay stub or call Human Resources for your balances. There is a little more flexibility about PTO days and the birthday holiday in that staff has until December 31 to use them.

SSRL staff will be handled a little differently than HEP staff. If a staff member is directly supported by SSRL money for more than 50 percent of the time over the entire fiscal year, that employee will be required to take one half as many unpaid days. Also, SLAC is working with the United Stanford Workers to allow payment to their members for the July 4th holiday even though the previous day is a day of leave without salary.

### HEP Operations Plan Change

The HEP running plan for the remainder of FY03 and FY04 has also been altered. The HEP operations schedule for the remainder of FY03 and FY04 now includes running the B Factory through June 29, 2003. We will also run E-158 from July 7 through the end of August. Finally, PEP-II will be turned on again in September to do Personnel Protection System (PPS) checks and then to get back up and running. The goal will be to run from September 2003 through June 2004.

### Stanford Salary Freeze

Regarding the Stanford Salary Freeze, SLAC must follow Stanford University HR policies. Fortunately, the salary freeze decision applies to the 2003-04 salary program only, so SLAC and the University expect to be able to return to a modest-sized salary program in 2004-05.

We expect the effect of these measures and policies will be to allow SLAC to avoid budget-driven layoffs or further mandatory leave-without-salary programs during FY04.

Finally, I would like to say to that I very much appreciate the cooperation and understanding that has marked your response to this difficult budget situation and to our decisions on how to deal with it. We can all be proud that we have managed this very difficult budget year with no budget-driven involuntary layoffs and with a program that involves all of the high energy physics faculty and staff.

For full details see: <http://www-group.slac.stanford.edu/hr/Important/2003-freeze.pdf>

## Kavli

(continued from page 1)

In this example of that dedicated purpose, the Foundation pledged \$7.5 million to establish the new institute, which will focus on recent developments in astrophysics, high-energy physics and cosmology. The Institute (located in a new structure between the ROB and the Auditorium) will open its doors in 2005.

At the site of the future 25,000 square-foot Institute, Kavli unveiled a 7-foot tall, steel and glass sculpture that was created at the Lab. The artwork, an as-yet-unnamed 'window on the Universe', incorporates a piece of SLAC history in the form of the window from the 40-inch bubble chamber.

The sculpture was designed by Catherine Carr (MD), fabricated by the MFD Shop and welded by Scot Johnson (MFD) and Eric Gaillant (MFD). Ernie Miholits (SEM) designed the foundation. (see *Bubble Chamber Glass Finds New Home*, p. 1)

In his remarks after the unveiling of the sculpture Kavli said, "Now we are starting our wild ride on the stars to new vistas."

Brief speeches were offered by Roger Blandford (Institute Director and first recipient of the Pehong and Adele Chen Chair of Particle Astrophysics and Cosmology), Fred Kavli, John Etchemendy (Stanford University Provost), Doug Osheroff (Stanford Physics Department



Speakers at the Inauguration (left to right): John Etchemendy, Persis Drell, Fred Kavli, Roger Blandford and Doug Osheroff

Chair), and Persis Drell (SLAC Research Director). Also present was future Institute Deputy Director and Assistant Director of Research at SLAC, Steven Kahn (Columbia University).

As astronomers increasingly use the tools and techniques of particle physics, astronomers and physicists will work more and more closely together on everything from equations to electronics. Thus, the Kavli Institute will capitalize on both rich scientific heritages and the complementary strengths these disciplines bring to the science emerging at their intersection.

Initially, Blandford intends to follow a roadmap that balances theory, computational astrophysics and phenomenology on one side, and experimental astrophysics and high-energy observing on the other. It will draw upon existing strengths in theoretical physics and astrophysics, gravitational physics and underground physics at Stanford.

As Blandford noted, "Part of the excitement of the field is that it is impossible to predict where it will be in five years' time and what its scientific focus will be. What is clear is that the time is right to build a world-class center at SLAC."



Fred Kavli and Roger Blandford admire the new sculpture

## Security

(continued from page 1)

on New York and Washington, D.C. This may vary depending on the information received from DOE Headquarters.

At both the Yellow and Orange levels, we are required to verify the identities of personnel entering the site. SLAC employees, scientific users and contractors operating vehicles are required to show their SLAC I.D. Passengers in these vehicles are required to show photo I.D. during the current Orange (SECON Level 2) level, but not under the Yellow (SECON Level 3+) level.

All visitors operating a vehicle and all their passengers in the vehicle are required to show a photo I.D. under both Orange and Yellow levels.

At SECON Level 2, the Security Officers at site entrances will continue to contact a visitor's SLAC Point-of-Contact to verify the visit. Therefore your continued assistance in advising the Main Gate of arriving visitors is appreciated. You can do this by

completing the SLAC Site Entry Authorization form, found under the 'Site Entry' heading at the Safeguards and Security Web site (<https://www-internal.slac.stanford.edu/ssec/>).

Additionally, Security Officers will visually check enclosed cargo areas of delivery vehicles entering the Laboratory (all cargo vehicles at SECON Level 2; selected cargo vehicles at SECON Level 3+). Signage is being prepared for posting at the two entry gates indicating the current SECON Level to arriving personnel.

All of us need to remain aware and report any suspicious activities to Security Officers or SLAC Safeguards and Security, Ext. 2551. Please stay alert and supportive of our Safeguards and Security Officers and staff members during this critical period.

For more information on Safeguards and Security at the Lab, see: <https://www-internal.slac.stanford.edu/ssec/>

## OMB Official Visits SLAC

Joel Parriott, Science Program Examiner for the Federal Office of Management and Budget (OMB), visited SLAC on Monday, March 10. One stop on his tour was the Final Focus Test Beam (FFTB) where researchers explained progress at SLAC on advanced accelerator technology.



Joel Parriott (fifth from left) is shown with FFTB researchers (shown left to right): Mark Hogan, Patrick Muggli (USC), Caoliann Leonetti O'Connell, Devon Johnson (UCLA), Mehdi Javanmard, Ben Cowan, Tom Katsouleas (USC), Eric Colby and Robert Noble (all ARDB).

## Recent Talk Explores Hydrogen Energy Technology

By Shawna Williams

Jules Verne once prophesized that 'water is the coal of the future.' On Wednesday, March 12, Theanne Schiros (ESRB) encouraged her colleagues at SSRL to help make that happen. About 30 people came to the hour-long talk on "Scientific Challenges and Research Opportunities in Hydrogen Energy Technologies," and many stayed afterward to discuss issues raised in the talk.

SSRL Deputy Director Jo Stöhr introduced Schiros, saying that "the broader topic—the future of energy resources in the world—is an important one."

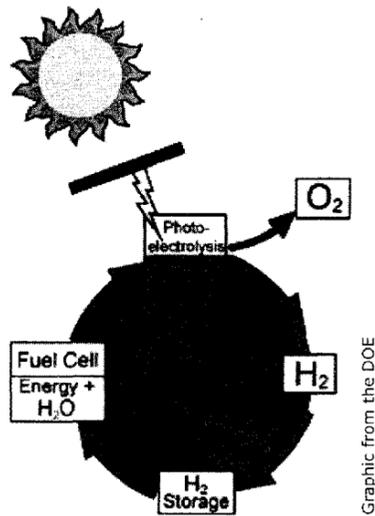
"DOE has estimated that CO<sub>2</sub> emissions will increase 60 percent in the next 50 years," Schiros said, "with potentially dramatic climate change consequences. This is why developing alternative fuel sources, like hydrogen, is so important." Schiros said she hoped her talk would inspire some SSRL researchers to work on effective means of making and storing hydrogen.

Hydrogen cells are already available for use in cars and in fact hydrogen fueling stations have appeared in Iceland and Southern California. However they are expensive and the current method of storing the fuel—cryogenics—is energetically inefficient. Moreover, fossil fuels are required to make the hydrogen.

There are many potential ways to make hydrogen renewably. Schiros's own thesis work focuses using the sun's energy to strip hydrogen from water, a process called photocatalytic decomposition. Other possibilities for hydrogen production include biomass decomposition and photobiological processes. For example, algae can be forced to make hydrogen, and decomposing peanut shells can produce hydrogen along with fertilizer while sequestering CO<sub>2</sub> in the form of solid carbon.

A bigger problem is storage and transport of hydrogen, which is

normally a gas. Some materials, including carbon nanotubes, have shown promise in absorbing and desorbing hydrogen as needed, and would take up little space. Before these can be regularly used, though, some way of making hydrogen cells from these materials cheaply and reliably must be developed.



Photoelectrolysis is a one-step process in which sunlight is absorbed in a semiconductor, splitting water into hydrogen and oxygen. This is one of the ways hydrogen can be produced and used as an inexhaustible, clean energy carrier. Hydrogen has enormous potential to form the foundation for a globally sustainable, pollution free, renewable energy system and meet growing energy demands while reducing, and eventually eliminating, CO<sub>2</sub> and other greenhouse gases.

"There are good reasons for making this effort," according to Schiros. Unlike many other energy sources, "with hydrogen cells the payoff is huge and they essentially have no negative consequences."

For more information on hydrogen energy technology, see: <http://www.eere.energy.gov/hydrogenandfuelcells/>

For more information on SSRL, see: <http://www-ssrl.slac.stanford.edu/>

## ORION Planning Workshop Held

By Tom Mead

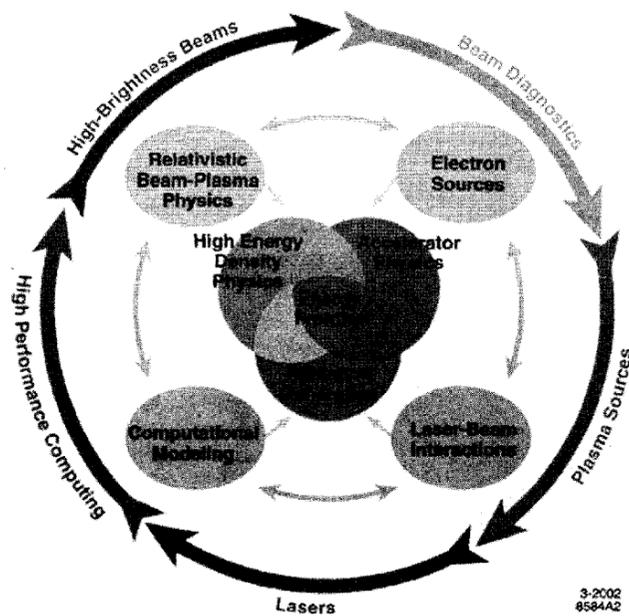
The second three-day workshop planning the capabilities of the ORION Center for Advanced Accelerator and Beam Physics Research concluded on February 20 at SLAC.

In keeping with the international mix of the 95 workshop registrants, ORION, like SSRL, will be a university and national laboratory collaboration. It will be a center of, and dedicated user facility for, experimental research in plasma and laser acceleration of particles, beam-plasma physics, ultra-short pulse electron and radiation sources, and potentially, laboratory astrophysics.

extraction beam lines, a user laser room and a data acquisition area.

The Center is being designed to provide for the research needs of the users. Thus, this workshop was used to explore the range of experiments envisioned by potential users and to review the types of beams available as well as the desired beam parameters. The workshop was an opportunity for the research community to provide input on the facility's test beams, layout, shared diagnostic equipment, simulation and computing capabilities, and user support infrastructure.

"This workshop," said Katsouleas, "was extremely useful for assuring



This graphic shows how the unique interrelationships of the ORION Center and its state-of-the-art facilities (outer circle) converge to enable advances in basic physics (mid-level), ultimately leading to the energy frontier.

As Tom Katsouleas, USC Professor of Engineering and co-director of the nascent ORION Center, noted, "It is at the highest energies that we see Nature on the smallest of scales. The realities within those smallest scales are the foundation upon which the origin of our Universe, stable matter, galaxies, and ultimately life, depends. The development of entirely new approaches to reaching such high energies is, at its heart, the true motivation behind ORION."

"But ORION is about more than developing future accelerators. It turns out that the short bunches, lasers and plasmas involved in these new approaches exhibit in themselves rich new physical behavior that ORION will unveil along the journey toward the high energy frontier."

Research will begin, at inception of the Center, with experiments at the Final Focus Test Beam (FFTB), an extensively instrumented beamline at the end of the SLAC main linac that can deliver 30 GeV electron and positron beams. The FFTB will be available for two or three more years.

In the longer-term, these experimental activities will be concentrated at the ORION facility, funded through the Center. The ORION Facility will be based on the Next Linear Collider Test Accelerator (NLCTA), operating at SLAC, which is capable of providing beams from 50 to 350 MeV in energy. For ORION, the NLCTA will be augmented with a new high-brightness photoinjector source, two experimental halls,

that ORION builds in the flexibility to serve as many user experiments as possible. I think the science on ORION's plate is excellent and the enthusiasm of the participants at the workshop reflected this."

The ORION project arose because particle physics addresses fundamental questions about the origin of mass and the observed symmetries in nature. Historically, these types of questions have been answered at the highest energies—the energy frontier—and science discoveries have emerged hand-in-hand with the exponential growth of machine energies. Thus, advanced accelerator research is essential to the future of particle physics.

There are advanced accelerator concepts based on plasmas, lasers, high-gradient radio frequency structures and novel technologies. They hold the significant promise of continuing the growth in available energy and, through it, profound new insights into nature.

Results from the workshop will help determine the facility's design, as well as help SLAC management plan for future on-site user needs. Construction is expected to start in October 2003, and the first beam for experiments is planned for 2005. The primary developers of the facility are the University of Southern California, the University of California at Los Angeles, Stanford University and SLAC.

## Meet the Local Safety Committee

By Linda Ahlf

The Local Safety Committee (LSC) would like to introduce itself. We are a committee of union and management representatives providing a resource for voicing safety concerns. The LSC is proving to be effective in addressing safety issues and promoting communication between union and management representatives.

This committee is made up of three union members and three members of management. It is co-chaired jointly by union and management representatives. From management we have Jack Hahn (ES&H), Ian Evans (SSRL) and Barry Webb (HR).

Current representatives from the union are Matt Neibel (EFD), Marty O'Donoghue (SEM) and Rocky Pena (SSRL). Lee Lyon is the committee administrator and Linda Ahlf is the committee secretary (both HR). In addition, a member of SEM management regularly attends the Local Safety Committee meetings.

Both workers and management can bring concerns about unsafe or hazardous working conditions to the LSC. The issues are discussed at our monthly meetings, assigned to the relevant committee person, who reports back at the following month's meeting. Minutes are kept to track issues and to make sure nothing slips through the cracks.

Should some emergency safety problem come up, the committee can access necessary resources at the highest levels at the Lab. This has proven to be a great way to get safety concerns addressed in a forum where results are the most important product.

Workers with safety concerns can talk to their committee representatives, and their problems will be addressed by the committee.

For more information on this Committee, contact Linda Ahlf, Ext. 2354, [lahlf@slac.stanford.edu](mailto:lahlf@slac.stanford.edu)

## POLICIES AND PROCEDURES UPDATE

From the Benefits Office:

### HAVE QUESTIONS ABOUT INVESTING YOUR RETIREMENT?

Representatives from Fidelity, Vanguard and TIAA-CREF will be holding individual counseling sessions at SLAC.

Please call the company directly to set up an appointment:

#### Fidelity

April 1  
May 6  
June 3

Call (800) 642-7131

#### Vanguard

April 2  
Call (800) 662-0106  
ext. 14500

[www.meetvanguard.com](http://www.meetvanguard.com)

#### TIAA-CREF

April 24  
May 22  
June 19

Call (800) 842-2007

[www.tiaa-cref.org/moc](http://www.tiaa-cref.org/moc)

All sessions will be held at:  
Building 280, Module A,  
Room 180

For more information on retirement and other benefits, see:

<http://www-group.slac.stanford.edu/hr/b/>

## MILESTONES

### Awards

Dabney, Janice (TD), a 2nd place winner of poetry contest hosted by the Palo Alto Public Art Commission, notified 3/3/03.

Pritzkau, David (ARDB), APS Award for Outstanding Doctoral Thesis Research in Beam Physics, notified 2/03

### Retirees

Bernstein, Dorel (ESD), 2/28  
Broeder, W. 'John' (EK), 2/28  
Sass, Robert (TD), 2/28  
Russell, Edwin (SCS), 3/14  
Cisneros, Eugene (ESD), 3/28  
Hilliard, W. 'Crash' (ESD), 3/28  
Nesterov, Valery (ESD), 3/28  
Zdarko, Richard (ESD), 3/31

To submit a Milestone, see:  
<http://www.slac.stanford.edu/pubs/tip/milestoneindex.html>

See Awards and Honors at:  
<http://www.slac.stanford.edu/slac/award/>

## Employee ES&H Training Assessments for 2003

The Environment, Safety and Health Division (ES&H) has opened the Employee Training Assessment (ETA) for this year, with updates to regulatory and class information.

In a continuing effort to improve the SLAC training experience, changes have been made to the instructional layout and design, simplifying the process and making it easier for supervisors to find and enter required information.

Please see the Web page at: <http://www.slac.stanford.edu/esh/training/eta/>

Supervisors are required by SLAC policy to annually ensure that ETAs are completed or updated for each of their employees.

### What is an ETA?

An ETA establishes basic training requirements in environment, safety and health areas for an employee.

## Many New Computer Courses Available

For scheduling and registration information, see:

<http://www.slac.stanford.edu/comp/edu/calendar.html>

This information is entered into a database used by supervisors and managers to track ES&H training in their group.

### Why do an ETA?

Per SLAC policy, a review of ES&H training requirements must be completed by each employee's supervisor for:

- All personnel during their annual performance review,
- New personnel, and
- Personnel whose duties or hazards change significantly.

The assessments define training required by regulations, DOE orders and SLAC policies. This helps a supervisor and employee determine what training is appropriate for them.

For more information about this and other ES&H Training, please see the ES&H Web site: <http://www.slac.stanford.edu/esh/training/> or contact Rod Hiemstra, Training Coordinator (Ext. 3662, [esh-training@slac.stanford.edu](mailto:esh-training@slac.stanford.edu)).

Contact: Larissa Williams, Ext. 3166, [larissa@slac.stanford.edu](mailto:larissa@slac.stanford.edu)

## Choose ENERGY STAR Products

By Luda Fieguth

ENERGY STAR® is a government-backed program helping businesses and individuals protect the environment through superior energy efficiency. The ENERGY STAR® label (shown below) is now on major appliances, office equipment, lighting, home electronics and more.

Through its partnerships with more than 7,000 private and public sector organizations, the ENERGY STAR® program delivers the technical information and tools that organizations and consumers need to choose energy-efficient solutions and best management practices.



Executive Order 13123 (issued by President Clinton on June 3, 1999) calls for Federal agencies to purchase ENERGY STAR® and other energy-efficient products when acquiring energy-using products (if life-cycle cost-effective). For product groups where ENERGY STAR® labels are not yet available, we are required to select products that are in the upper 25 percent of energy efficiency as designated by the Federal Energy Management Program.

SLAC is committed to encouraging the purchase of energy-efficient products in a manner that does not impede product performance, safety or overall value.

For more information about the ENERGY STAR® products and to obtain access to the product database, see: <http://energystar.gov/>

## Upcoming Events

**Tues. March 25, Noon**  
Panofsky Auditorium  
SLAC WOMEN'S INTERCHANGE SEMINAR  
Jaclyn Zoccoli, Success Connection and Marking Solutions Group  
"Promoting Yourself Professionally and Personally"

**Tues. March 25, 12:30 p.m.**  
Orange Room  
SLAC EXPERIMENTAL SEMINAR  
Scott Dodelson, Fermilab  
"Dark Energy in the Universe"

**Tues. March 25, 4:00 p.m.**  
Green Room  
SLAC PHYSICS MEETING  
Lab Community, SLAC and more  
Scientific Discussion Hour

**Wed. March 26, 12:30 p.m.**  
Redwood Room CD  
SLAC YPP ACCELERATOR PHYSICS LECTURE  
Jerry Hastings, SLAC  
"Ultrafast X-Ray Sources at SLAC: SPPS and LCLS"  
<http://www-project.slac.stanford.edu/ypp/>

**Sun. March 30-31, 9:00 a.m.**  
Orange Room  
SLAC PHYSICS MEETING  
Krishna Kumar/Vickee Flynn, U of Massachusetts/SLAC  
E-158 Collaboration Meeting

**Tues. April 1, 12:30 p.m.**  
Orange Room  
SLAC EXPERIMENTAL SEMINAR  
Martin Cooper, LANL  
"A New Search for the Neutron Electric Dipole Moment"

**Tues. April 1, 4:00 p.m.**  
Green Room  
SLAC PHYSICS MEETING  
Lab Community, SLAC and more  
Scientific Discussion Hour

**Tues. April 1, 4:15 p.m.**  
Stanford, SEQ 201  
(Refreshments 4:00 p.m., Physics Coffee Room)  
STANFORD APPLIED PHYSICS/PHYSICS DEPT. COLLOQUIUM  
Phil Bucksbaum, U of Michigan  
"Ultrafast Optical Control of Quantum Dynamics"

**Wed. April 9, 4:15 p.m.**  
Orange Room, (Refreshments-4:00)  
SLAC ASTROPHYSICS SEMINAR  
David Whittman, Bell Labs/Lucent Technology  
"The Deep Lens Survey"

Please send additions to:  
[seminars@slac.stanford.edu](mailto:seminars@slac.stanford.edu)

For complete event listings, see:  
<http://www.slac.stanford.edu/grp/pao/seminar.html>

## The Interaction Point

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