

# Caltech 336

T E S S M T W T F S S M T W

The campus community biweekly

April 18, 2002, vol. 2, no. 8



At your service in CEFCU's campus branch are (front) Brian Spritzer, manager, and Teresa Brown; (back) Sandra Lawson, Leela Mokashi, Raquel Escobedo, and Veronica Ojeda.

## A different kind of lending institution

The Caltech Employees Federal Credit Union, says Rich Harris, is different.

For one thing, points out its president and CEO, it's not just what people commonly think of as "the little office with three desks in the basement of Spalding." To the contrary, many don't realize that the CEFCU is the 180th largest credit union in the country—out of more than 10,000—and that it recently reached a landmark \$500 million in assets.

"We're a professional, high-caliber financial institution," Harris says with pride, "and members are beginning to perceive us that way."

And in a number of ways, the CEFCU also is unlike banks, savings and loan institutions, and even other credit unions, according to Harris. "Our theme right now is 'We are different,' and we're hoping people will make that discovery."

The difference begins with the contrast between for-profit institutions and credit unions. The latter are nontaxable, member-owned nonprofit cooperatives based on the premise that while some

see *Credit Union*, page 6

## Caltech physics, geology best in U.S.

The 2003 *U.S. News & World Report* graduate school rankings have named Caltech number one in the nation for its PhD programs in physics (tied with MIT) and geology. The Institute also ranked second for its doctoral program in chemistry, third in applied mathematics, fifth in biological sciences, and eighth in mathematics; and its engineering school was rated seventh. More information on the rankings can be found online at [www.usnews.com/usnews/edu/grad/rankings/rankindex.htm](http://www.usnews.com/usnews/edu/grad/rankings/rankindex.htm).

## Gaining insight into the brain

A panel of experts who conduct a wide range of brain research will come together for Caltech's Biology Forum, "Gray Matters: Perception, Intention, Memory, and Dysfunction in the Brain," on Thursday, April 25, at 8 p.m. in Beckman Auditorium. The event is free and open to the public.

The program, which is sponsored by Caltech and Huntington Memorial Hospital and cosponsored by the San Gabriel Valley Newspaper Group, will cover topics as diverse as the dynamics of smell, moving robotic limbs using brain signals, and pinpointing and excising the spot in the brain where epilepsy seizures occur. "Our speakers exemplify the world-class work that is being done on the brain right here in Pasadena," says Paul Patterson, professor of biology and forum coordinator.

The speakers will be Richard Andersen, *Boswell Professor of Neuroscience*; Gilles Laurent, professor of biology and computation and neural systems; Adam Mamelak, neurosurgical director of the Epilepsy and Brain Mapping Program at Huntington Memorial Hospital; and Steven Quartz, assistant professor of philosophy. Robert Lee Hotz, a Pulitzer Prize-winning *Los Angeles Times* science writer, will moderate.

Andersen and his colleagues are beginning to decipher neuron firing patterns in the visuomotor part of the brain preceding arm movement. Using this code, they can now predict where the arm will be moved. The eventual goal is to develop a neural prosthesis that records this intended-movement signal from paralyzed patients, enabling them to operate a robot limb or other external devices.

Laurent studies neural coding in the brain, focusing on the dynamics of neuronal circuits, brain oscillations, and the sense of smell in insects, fish, and rodents. His laboratory studies the general problem of olfactory representations, such as how brain circuits represent an odor and what they do to optimize those representations.

One of just a few such comprehensive centers in the country, the Epilepsy and Brain Mapping Program maps patients' seizures and normal brain functions, pinpoints the seizures' source, and excises the damaged portion of the brain. It provides the most advanced seizure evaluation and treatment now available.

Quartz uses experimental methods from neuroscience to study traditional problems of mind, ranging from the formal learning properties of neurally constrained developing systems to the nature of moral decision-making.

For more information, call (626) 395-4652 or toll-free 1 (888) 222-5832. Persons with disabilities can call (626) 395-4688 (voice) or (626) 395-3700 (TDD) weekdays, 9 a.m. to 4 p.m.

## Home on the reservation



Undergrads Janey Zhou and Katie Homann helped paint houses at the Navajo Nation in Utah in March. More than 40 students took part in this year's Alternative Spring Break, sponsored by the Caltech Y.

### Caltech after dark:

## Chauffeurs do it at night

Javier Marquez

6:30 p.m., leave Caltech campus

The Lincoln Town Car flies down the 210 freeway, so silent and smooth that it's hard to believe it's moving, but a glance at the speedometer confirms that we're traveling at 63 mph.

It's a white car with a blue roof and it is part of a fleet of six cars that collects Caltech's itinerant professors, administrators, and visitors and delivers them wherever their business may take them, at any hour of the day and on any day of the week.

On this particular day, arrangements have been made for Ahmed Zewail, Pauling Professor of Chemical Physics and professor of physics, to be picked up about 30 miles away in Claremont, where he has presented a lecture to an auditorium of undergraduates, and taken back to his Caltech offices. He is expecting his ride to be there at 7:30 p.m.

The drivers of Caltech's Chauffeur Service know that the limits of their job extend far beyond operating the vehicle and opening its doors. Raul Turcios, the driver on this trip, is wearing a navy blazer and dark trousers, a uniform that he and his fellow drivers slip in and out of so often that they're known around Transportation Services as "the chame-

leons." This is the first of five after-hours trips covered by as many drivers; the latest scheduled pickup is at the L.A. airport at 11:30 p.m.

"We all made a commitment early on when we asked to be on this rotation and a lot of times you make your plans around the week that you work," he explains. "You become real close with the person in front and behind you on the rotation. You build a pretty good bond because the guy behind you supports you and can get you out of a jam. Plus you're a backup to the guy in front of you." On any given day, five drivers cover the assigned trips, with three reserves in case of unusually heavy demand. Today, Turcios was one of the reserves.

The familiarity is probably what helps the Chauffeur Service run so smoothly, and why drivers remain drivers for so long. Elsa Echegaray, the only woman on the team, has been a Caltech chauffeur for 17 years, and Davy Stone for 11. Over the years, they say, the passengers develop a sense of family with their drivers.

"Dr. Zewail has known me personally for a long time," says Turcios, who has been a chauffeur for over a decade. "A lot of professors know us by name and all the drivers appreciate that. Many of the faculty have expressed that they feel good with

see *Night life*, page 2



# NewsBriefs



Former Senator Gary Hart (center), with Provost Steve Koonin and Visiting Professor of Law Edward McCaffery, spoke on counterterrorism at a recent Executive Forum.

## Honors and awards

**Thomas Caughey**, Hayman Professor of Mechanical Engineering, Emeritus, has been chosen by the Engineering Mechanics Division of the American Society of Civil Engineers as the recipient of the 2002 Theodore von Kármán Medal. To be awarded at the Engineering Mechanics Division Conference scheduled for June 2–5 in New York City, the medal is for Caughey's "pioneering developments and sustained leadership in developing tools for dealing with challenging problems in engineering science."

**David Chan**, assistant professor of biology and Bren Scholar, has been selected to receive a 2002 Beckman Young Investigator Award. Established by the Arnold and Mabel Beckman Foundation in 1991, the Beckman Young Investigator program "provides research support to the most promising young faculty members in the early stages of their academic careers." The \$240,000 grant will be awarded over a three-year term, for the conducting of innovative scientific research.

**William Deverell**, associate professor of history, will serve as the 2002–03 Haynes Fellow beginning July 1. An authority on the West who has written extensively about the history of California and Los Angeles, he has authored or edited several books, including last year's *Metropolis in the Making: Los Angeles in the 1920s*, a collection of essays coedited with Tom Sitton of L.A. County's Natural History Museum. The oldest private foundation in the city of Los Angeles, the Haynes Foundation has been supporting social science research into regional policy issues since 1926.

**John Todd**, professor of mathematics, emeritus, and his late wife, **Olga Taussky Todd**, also professor of mathematics, emerita, have been selected to have their pictures displayed in the Portrait Gallery of Distinguished NBS/NIST Alumni. The gallery honors staff members and research associates of the National Bureau of Standards—now the National Institute of Standards and Technology—from 1901 to the present. Only 178 alumni have at this time been selected for the gallery. Todd and Taussky Todd were nominated by their former colleagues at NBS/NIST, with the nomination endorsed by the Standards Alumni Association's Portrait Committee and approved by the current NIST director.

**Ahmed Zewail**, Pauling Professor of Chemical Physics and professor of physics, who earned his PhD from the University of Pennsylvania in 1974, has received that school's Distinguished Alumni Award. He has also received the G. M. Kosolapoff Award from the University of Auburn.

## Personals

### Welcome to Caltech

#### April

**Chan Kwak**, postdoctoral scholar, materials science; **Yuki Onishi**, visitor, aeronautics; **Ulrich Schatzschneider**, postdoctoral scholar, chemistry.

### New positions

**Camille Harper** has been appointed associate director of foundation relations, effective April 8. Formerly associate director of corporate relations at Caltech, she came to the Institute in October 2000 from Claremont Graduate University, where she had been director of alumni and donor relations. She received her AB from UC Davis in 1991 and her MA from Claremont in 1999, both in English.

### Degrees earned

**Lisa Telles**, a senior financial analyst in the Treasurer's Office, has recently earned a master's degree in business administration from Pepperdine University's Graziadio School of Business and Management, with graduation ceremonies held on April 13. Telles earned her bachelor's degree in business management from Mount St. Mary's College, and joined the Treasurer's Office in 1994, where she has been an administrative assistant, assistant to the treasurer, and chief investment officer.

## Media minute

Postdoctoral scholar **Jean-Luc Margot's** research on near-Earth asteroids was featured on the *Science Express* and BBC News Web sites on April 11. He and his coauthors found that binary asteroids—two bodies that orbit the sun close together—most likely form when a single asteroid swings close to Earth, is ripped apart by the planet's tidal attraction, and eventually reforms into separate bodies. More information is available at [www.gps.caltech.edu/~margot/2000DP107](http://www.gps.caltech.edu/~margot/2000DP107).

An Associated Press story featuring **Ken Libbrecht**, professor of physics, ran in the *Pasadena Star-News* on April 1. Jokingly referring to him as "perhaps the flakiest man in the rarefied world of physics," the article describes his research, which involves growing synthetic snow crystals as beautiful and unique as those found in nature. Libbrecht's work can be viewed online at <http://snowcrystals.net>.

### JPL open house canceled

JPL's annual open house will not take place this year due to increased security concerns and related logistical problems. The popular weekend event usually draws forty to fifty thousand visitors each spring. According to spokeswoman Veronica McGregor, there were no specific threats, but heightened security would make parking and transportation difficult. Visitors would not be able to park in JPL lots as in previous years, forcing long waits for shuttle buses, she said. No alternate date has been set yet, but JPL Deputy Director Eugene Tattini said, "We are determined to reinstate this major event to the Lab's calendar in the near future." The laboratory is offering more frequent public tours during the week to compensate.

### Night life, from page 1

the way things work. We're known to be reliable, and they know we'll be there. Another thing they like is that our motto is 'We never say no.'"

*6:43 p.m., traveling east in the 210 diamond lane past heavy but swiftly moving traffic*

The driver's face is often the first familiar one that Caltech's globetrotting faculty see after a long flight and days away from home. For visitors, the chauffeur can be the first Caltech representative they meet, so he or she must make a good first impression. That means being on time to greet the arriving fliers or getting them to their planes without any delays.

Good drivers must have a feel for traffic patterns, anticipate trip times, memorize alternate routes, and be able to second-guess flight schedules. Their gear includes a cell phone to communicate with Central Planning back at Caltech, and a map book is their Bible. The radio is almost always tuned to the traffic report.

Turcios says he enjoys acting as a tour guide, especially for first-time visitors to Los Angeles. He will tell them where the ocean is and point out the Hollywood sign. "They get the biggest kick on the ramp from the 105 east to the 110 north, which is really high. There they get a great view, from the ocean sometimes as far as Mount Wilson."

The first-time visitor may also need a more detailed orientation, which the drivers provide gladly. This may include delivery of the guest's keys, directions to their campus building, a tour of the campus and the supermarket, a lesson in working the security gates, and even directions to the nearest parking lot.

"That's something you don't get from an outside service," he says.

*7 p.m., arrive at Claremont Colleges and wait outside the designated building*

Our early arrival allowed enough time for a false turn down Claremont's dark lanes. From the street, we spy Zewail having dinner with a group of students inside an elegant old mansion. We wait in the car with the motor humming and the air conditioner on full blast. "He likes the AC cold," Turcios says.

Caltech has made cars and drivers available to its VIPs for more than 50 years, but the tradition came under cost-cutting fire several years ago. The administration declared that providing its own drivers and maintaining its own vehicles—albeit donated ones—was too expensive and plans were in the works to switch to a private chauffeur company. Reaction from the divisions and a few vocal professors was so negative that the current system was instituted instead. Now, the passenger's department or division gets charged a flat fee that ranges from \$45 for a trip to the Burbank airport up to \$70 for a weekend trip to LAX.

A different kind of crisis visited the service in the form of last year's terrorist

attacks, which brought chaos to the nation's air travel. Massive flight cancellations and airport closures stranded travelers everywhere, and private cars were banned from airports for weeks after flights resumed. Travelers had to be dropped off at parking lots, not at the terminals, because Caltech's cars are classified as private vehicles. But the professors' affection for the service became evident.

"The few people who traveled could have taken a cab or a limo inside the airport," Turcios explains. "It was a madhouse there, yet people were loyal to us."

Turcios hops out of the car and opens the rear passenger door for Zewail. Settled in the comfortable back seat, the Nobel laureate remarks that the Chauffeur Service is his preferred method of transportation, which he uses roughly four times a month.

"I really believe in our system of transportation, and I do feel it's part of our family," he says. "After September 11, I decided not to go to an outside service. I knew we were in the middle of a crisis and that there would be a little inconvenience, but they had brought a lot of conveniences to us. To me this is very special. In fact, I don't recall in all these years taking a taxi."

## Zewail book signings scheduled

Ahmed Zewail, the winner of the 1999 Nobel Prize in chemistry, will be signing copies of his autobiography *Voyage Through Time: Walks of Life to the Nobel Prize*, at the Caltech Bookstore on Friday, May 10, beginning at noon.

He said the book came about almost as an afterthought.

"In '97 I was intrigued by a question that an interviewer asked. He wanted to know how I became a scientist," Zewail said. "I started to write a rough biography, but soon I put it aside without going back to it."

"After I won the Nobel Prize, people wanted to know about my life, and I found that much of the information that was being repeated was not right. Then a publisher friend convinced me to finish the book."

The book was published in February. It is now in its second printing and is being translated into other languages. Zewail said he will keep none of the profits.

"The royalties will go to a fellowship to help Egyptians study at American universities in science and the humanities," he said.

Zewail will also be at Vroman's Bookstore later that same day. At 7 p.m. he will deliver a short discussion, which will be followed by a book signing. Vroman's is located at 695 E. Colorado Boulevard in Pasadena.



Caltech's chauffeurs are (from left) Jesse Bustamantes, Davy Stone, Elsa Echegaray, Johnny Noyes, Henry Riley, Raul Turcios, Marcos Carretino, and Billy Sandoval.



# April 22–28, 2002

M T W T F S S

## Monday, April 22

### Aeronautics Seminar

101 Guggenheim Lab, Lees-Kubota Lecture Hall, 1 p.m.—“Aircraft Safety in the Age of Terrorism,” Dr. Mel Kanninen, chairman of the FAA’s Aircraft Safety Research Division, Technical Oversight Group on Aircraft Anti-Terrorism. Information: [www.galcit.caltech.edu/seminars.shtml](http://www.galcit.caltech.edu/seminars.shtml).

### Astronomy Tea Talk

106 Robinson, 4 p.m.—“The Las Campanas Infrared Survey: The Photometric Redshift Survey and the Galaxy Luminosity Function at  $z \sim 1$ ,” Hsiao-Wen Chen, Observatories of the Carnegie Institution of Washington. Information: [www.astro.caltech.edu/~kartik/tea\\_talks](http://www.astro.caltech.edu/~kartik/tea_talks).

### General Biology Seminar

119 Kerckhoff, 4 p.m.—“Functional Genomics of Memory in *Drosophila*: A Marriage of Pre- and Post-Genomic Approaches,” Josh Dubnau, Cold Spring Harbor Laboratory.

### Geology and Planetary Sciences Kliegel Lecture

155 Arms, Robert Sharp Lecture Hall, 4 p.m.—“Sea Ice: The Glacial Cycles’ Climate Switch,” Eli Tziperman, Rymer Family Professor, department of environmental sciences, Weizmann Institute of Science, Israel. Information: [www.gps.caltech.edu](http://www.gps.caltech.edu).

## Tuesday, April 23

### Caltech Library System Presents: Chemistry Information Resources

Sherman Fairchild Library, multimedia conference room, noon to 1:30 p.m.—Learn to make the most of chemistry information tools and services provided by the Caltech Library System. Information and registration: <http://library.caltech.edu/learning/form.htm>. Open to Caltech community members only.

### Institute for Quantum Information Seminar

74 Jorgensen, 3 p.m.—“Trading Quantum and Classical Resources in Data Compression,” Patrick Hayden, post-doctoral scholar in physics, Caltech.

## Wednesday, April 24

### Faculty-Student Lunch for Women

139 Moore, noon—Female students are invited to attend an informal lunch with Erin Schuman, Caltech associate professor of biology, and Karen Parfitt, Pomona College associate professor of biology, to learn about their individual pathways to success, current research projects, and thoughts on women in science. RSVP [westclub@caltech.edu](mailto:westclub@caltech.edu).

### Astronomy Colloquium

155 Arms, Robert Sharp Lecture Hall, 4 p.m.—“The Interaction of GRBs with Their Environment: What We Can Learn from and about GRBs,” Rosalba Perna, Harvard University. Information: <http://astro.caltech.edu/~jlc/colloquia.html>.

### Environmental Science and Engineering Seminar

142 Keck, 4 p.m.—“Advanced Factor Analysis Methods for Receptor Modeling,” Philip Hopke, Clarkson Distinguished Professor, department of chemical engineering, Clarkson University. Refreshments, Keck lobby, 3:40 p.m. Information: [www.esse.caltech.edu/seminars.html](http://www.esse.caltech.edu/seminars.html).

### Earnest C. Watson Lecture

Beckman Auditorium, 8 p.m.—“Can a Machine Learn to Play ‘Where’s Waldo?’”, Pietro Perona, professor of electrical engineering and director of the Center for Neuromorphic Systems Engineering, Caltech. Admission is free. Information: 395-4652, 1 (888) 2CALTECH, or [events@caltech.edu](mailto:events@caltech.edu). Individuals with a disability: 395-4688 (voice) or 395-3700 (TDD). Visit Public Events at [www.events.caltech.edu](http://www.events.caltech.edu).

## Thursday, April 25

### Inorganic-Electrochemistry Seminar

147 Noyes, Sturdivant Lecture Hall, 2 p.m.—“Bioinspired Catalysis, or How to Teach Old Molecules New Tricks,” Sergiu Gorun, associate professor of inorganic and bioinorganic chemistry, department of chemistry, Brown University.

### Geoclub Seminar

151 Arms, Buwalda Room, 4 p.m.—“Transpressional Systems,” Basil Tikoff, assistant professor, structural geology and tectonics, University of Wisconsin–Madison. Refreshments, 3:45 p.m. Information: [www.gps.caltech.edu/seminars/geoclub/](http://www.gps.caltech.edu/seminars/geoclub/).

### Physics Research Conference

201 E. Bridge, 4 p.m.—“How BaBar Grew Up,” Natalia Kuznetsova, Fermilab. Refreshments, 108 E. Bridge, 3:45 p.m. Information: [www.pma.caltech.edu/~physcoll/PhysColl.html](http://www.pma.caltech.edu/~physcoll/PhysColl.html).

### Science, Ethics, and Public Policy Seminar

25 Baxter, 4 p.m.—“A Journey More Important Than Its Destination: Einstein’s Quest for General Relativity, 1907–1921,” Michael Janssen, assistant professor, Program in History of Science and Technology, University of Minnesota, Twin Cities. Refreshments. Information: [www.hss.caltech.edu/ses/index.html](http://www.hss.caltech.edu/ses/index.html).

### Robert W. Vaughan Lecture in Chemical Engineering

106 Spalding Lab, Hartley Memorial Seminar Room, 4 p.m.—“The Physics of Leukocyte Adhesion: From Individual Receptors to the Collective Dynamics of Many Cells,” Daniel A. Hammer, professor and chairman, department of bio-engineering, and professor of chemical engineering, University of Pennsylvania. Refreshments, 113 Spalding Labs, 3:30 p.m. Information: [www.cheme.caltech.edu/calendar/seminars.html](http://www.cheme.caltech.edu/calendar/seminars.html).

### 2002 Biology Forum

Beckman Auditorium, 8 p.m.—“Gray Matters: Perception, Intention, Memory, and Dysfunction in the Brain.” Panelists are Richard Andersen, Boswell Professor of Neuroscience, Caltech; Gilles Laurent, professor of biology and computation and neural systems, Caltech; Adam Mamelak, neurosurgical director of the Epilepsy and Brain Mapping Program, Huntington Memorial Hospital; and Steven Quartz, assistant professor of philosophy, Caltech. Moderator is *Los Angeles Times* science writer Robert Lee Hotz. Admission is free.

## Friday, April 26

### Fluid Mechanics Seminar

101 Guggenheim Lab, Lees-Kubota Lecture Hall, 3 p.m.—Topic to be announced. Professor Leonhard Kleiser, Institute of Fluid Dynamics, ETH Zurich. Information: [www.galcit.caltech.edu/Seminars/Fluids/CurrentFluids/index.html](http://www.galcit.caltech.edu/Seminars/Fluids/CurrentFluids/index.html).

### Inorganic-Organometallics Seminar

151 Crellin, 4 p.m.—“Fischer Carbenes of Platinum(II),” Jonathan Owen, graduate student in chemistry, Caltech.

### Kellogg Seminar

Lauritsen Library, 4 p.m.—“Classical Chromodynamics of Heavy Ion Collisions,” Dmitri Karzheev, Brookhaven National Laboratory.

### LIGO Science Seminar

155 Arms, Robert Sharp Lecture Hall, 4 p.m.—“Suspension Design for Advanced LIGO,” Norna Robertson, University of Glasgow.

## Bridging the two-culture divide

The Society for Literature and Science extends an invitation to attend and contribute to its 16th annual conference, to take place October 10–13 at the Pasadena Hilton. Jay Labinger, administrator of Caltech’s Beckman Institute and a conference organizer, is especially encouraging Caltech faculty, researchers, and students to consider entering proposals. “We’re hoping to raise awareness and interest in the SLS here on campus,” he says.

The society’s goal is to foster multidisciplinary study of how the sciences, engineering, technology, computer science, medicine, the social sciences, the humanities, and the arts interrelate. Inaugurated in 1985 at the 17th International Congress of the History of Science in Berkeley, California, the SLS attracts hundreds of participants from various disciplines, as well as independent scholars and artists, to its annual meetings. A highlight of SLS 2002 will be a plenary event hosted by the Huntington Library and featuring a presentation by physicist Charles Falco, who has been collaborating with artist David Hockney on the latter’s much-publicized and controversial recent theory concerning the use of lenses by painters.

The 2002 conference seeks to continue building and strengthening bridges between the fields that make up the broad range of fields of interests to members and attendees. The organizers encourage innovative proposals for independent papers; preorganized sessions covering several related papers; panels and round table discussions; and nontraditional formats, particularly those that are interdisciplinary in nature. Detailed information on the conference and on submitting proposals is available online at <http://SLS-2002.caltech.edu>. The deadline for submission is June 1. Questions or suggestions may also be sent to Jay Labinger at [jal@its.caltech.edu](mailto:jal@its.caltech.edu). For general information on SLS, visit <http://www.litsci.org/>.



April 29–May 5, 2002

M T W T F S S

Monday, April 29

**Astronomy Tea Talk**  
106 Robinson, 4 p.m.—Topic to be announced. Aaron Barth, postdoctoral scholar in astronomy, Caltech. Information: [www.astro.caltech.edu/~kartik/tea\\_talks](http://www.astro.caltech.edu/~kartik/tea_talks).

**Computation and Neural Systems Seminar**  
24 Beckman Labs, 4 p.m.—“Saliency Maps in Area V4: Freeviewing Visual Search,” Dr. James Mazer, department of psychology, UC Berkeley.

**Congressional Science Scholar Forum**  
Beckman Institute auditorium, 4 to 6 p.m.—Hosted by Congressman Adam Schiff in conjunction with Caltech, the forum will feature a presentation entitled “Living with Earthquakes: Fear and Science in L.A.,” to be given by Dr. Lucy Jones, U.S. Geological Survey. High-school students in particular are encouraged to attend. RSVP by April 24 to Paul Kidwell in Congressman Schiff’s office, (626) 304-2727.

**General Biology Seminar**  
119 Kerckhoff, 4 p.m.—“The SWI Complex in Development and Disease,” Dr. Moshe Yaniv, department of developmental biology, Pasteur Institute.

**Geology and Planetary Sciences Seminar**  
155 Arms, Robert Sharp Lecture Hall, 4 p.m.—“Heinrich Events: The North Atlantic Layers and Their Global Abrupt Climate Change Correlatives,” Sidney Hemming, assistant professor, department of earth and environmental sciences, Lamont Doherty Earth Observatory, Columbia University. Information: [www.gps.caltech.edu](http://www.gps.caltech.edu).

**Inorganic-Electrochemistry Seminar**  
147 Noyes, Sturdivant Lecture Hall, 4 p.m.—“The Elegance and Force of Chemical Catalysis,” Mahdi M. Abu-Omar, assistant professor, department of chemistry, UCLA.

**Solid State Sciences Seminar Series (S^5)**  
102 Steele, 4 p.m.—“Physical Properties of Colossal Magnetoresistive Manganites,” Professor Elbio Dagotto, department of physics, Florida State University. Refreshments, Watson lobby, 3:45 p.m. Information: [www.its.caltech.edu/~yehgroup/s5/](http://www.its.caltech.edu/~yehgroup/s5/).

**Mathematics Colloquium**  
151 Sloan, 4:15 p.m.—“The Nonlinear Fourier Transform,” Professor Terence Tao, department of mathematics, UCLA. Information: [www.math.caltech.edu/events/colloq.html](http://www.math.caltech.edu/events/colloq.html).

Tuesday, April 30

**Caltech Library System Presents: GeoRef and Other Earth and Environmental Science Databases**  
Sherman Fairchild Library, multimedia conference room, noon to 1:30 p.m.—Learn about GeoRef’s database for geology and earth sciences, as well as Inspec (for geophysics), SciFinder Scholar (for geochemistry), Water Resources Abstracts, and Gmelin (for inorganic minerals information). Registration: <http://library.caltech.edu/learning/form.htm>. Open to Caltech community members only.

**Institute for Quantum Information Seminar**  
74 Jorgensen, 3 p.m.—“A Tracial Quantum Central Limit Theorem,” Greg Kuperberg, associate professor, department of mathematics, UC Davis.

**Joint Mechanical Engineering/Solid Mechanics Seminar**  
206 Thomas, 3 p.m.—“Hitchhiking the Interplanetary Superhighway,” Martin W. Lo, Navigation and Mission Design Section, JPL. Refreshments, 210 Thomas, 2:45 p.m.

**Carnegie Observatories Colloquium Series**  
William T. Golden Auditorium, 813 Santa Barbara Street, 4 p.m.—“Tidal Tales: Using Tidal Debris to Probe Galaxies and Galaxy Clusters,” Professor Chris Mihos, department of astronomy, Case Western Reserve University. Refreshments, 3:30 p.m.

Wednesday, May 1

**Mathematical Physics Seminar**  
351 Sloan, noon—“On the Theorems of M. G. Krein and L. A. Sakhnovich,” Alexander Teplyaev, NSF postdoctoral fellow, department of mathematics, UC Riverside. Information: [www.math.caltech.edu/events/mathphys.html](http://www.math.caltech.edu/events/mathphys.html).

**Astronomy Colloquium**  
155 Arms, Robert Sharp Lecture Hall, 4 p.m.—“Science Goals of the Keck Interferometer,” Mike Shao, JPL. Information: <http://astro.caltech.edu/~jlc/colloquia.html>.

Thursday, May 2

**Ulric B. and Evelyn L. Bray Seminar**  
25 Baxter, 4 p.m.—“An Equilibrium Model of Asset Pricing and Moral Hazard,” Hui Ou-Yang, assistant professor of finance, Fuqua School, Duke University. Refreshments.

**Chemical Engineering Seminar**  
106 Spalding Lab, Hartley Memorial Seminar Room, 4 p.m.—Topic to be announced. Brian A. Korgel, assistant professor and Chevron Centennial Teaching Fellow in Chemical Engineering, University of Texas at Austin. Refreshments, 113 Spalding, 3:30 p.m. Information: [www.cheme.caltech.edu/calendar/seminars.html](http://www.cheme.caltech.edu/calendar/seminars.html).

**Inorganic-Electrochemistry Seminar**  
147 Noyes, Sturdivant Lecture Hall, 4 p.m.—“One-Electron Chemistry of 8-Oxoguanine: Lesions, Cross-Links, and Mutagenesis,” Professor Cynthia J. Burrows, department of chemistry, University of Utah.

**Physics Research Conference**  
201 E. Bridge, 4 p.m.—“Quantum Information Processing with Trapped Atomic Ions,” Dr. David Wineland, National Institute of Standards and Technology, Boulder, Colorado. Refreshments, 108 E. Bridge, 3:45 p.m. Information: [www.pma.caltech.edu/~physcoll/PhysColl.html](http://www.pma.caltech.edu/~physcoll/PhysColl.html).

Friday, May 3

**Fluid Mechanics Seminar**  
101 Guggenheim Lab, Lees-Kubota Lecture Hall, 3 p.m.—“High Reynolds Number Turbulent Boundary Layers: Mean Flow Scaling,” Min S. Chong, associate professor, mechanical and manufacturing engineering department, University of Melbourne. Information: [www.galcit.caltech.edu/Seminars/Fluids/CurrentFluids/index.html](http://www.galcit.caltech.edu/Seminars/Fluids/CurrentFluids/index.html).

**Arnold O. Beckman Lecture**  
22 Gates Annex, 4 p.m.—“Asymmetric Hydrogenation,” Professor Ryoji Noyori, Nagoya University, Japan. Refreshments.

**Kellogg Seminar**  
Lauritsen Library, 4 p.m.—“The Astrophysical S-factor for 7Be+p->8B, and Solar Neutrinos,” Kurt Snover, research professor, physics, University of Washington.

**LIGO Science Talk**  
155 Arms, Robert Sharp Lecture Hall, 4 p.m.—Topic to be announced. Erika D’Ambrosio, postdoctoral scholar, LIGO Laboratory, Caltech.

**William Bennett Munro Memorial Seminar**  
25 Baxter, 4 p.m.—“On Specifying Graphical Models for Causation and the Identification Problem,” David Freedman, professor of statistics, UC Berkeley. Refreshments.

Students, faculty to confer

Caltech administrators, faculty, and students will gather for the first student-faculty conference in several years on Monday, April 29, from 11 a.m. to 2:30 p.m. in Ramo Auditorium. Administrators will answer questions on student issues, and faculty alumni will discuss their experiences as undergrads. Following lunch, committees composed of students and faculty will lead discussions on academic advising and the Honor Code.



# CampusEvents

## Monday, April 22

### Baby Furniture and Household Equipment Pool

234 S. Catalina, 10 a.m. to 1 p.m.—Loans of kitchen and household necessities and baby furniture are made to members of the Caltech community. Information: 584-9773.

### Ballroom Dance Club

Winnett lounge, 7:30 p.m.—Merengue for beginners, professionally taught. If you missed the previous classes but have some dance experience, come anyway. Cost is \$6 per lesson for Caltech students, \$8 per lesson for others. No partner is required. Refreshments and a half-hour practice period will follow each class.

### “Listening to the Page: Reading, Writing, and Reviewing with Alan Cheuse”

Beckman Institute auditorium, 8 p.m.—Cheuse is a fiction writer, journalist, and book commentator on National Public Radio’s *All Things Considered*. The author of novels, short story collections, and a memoir, he has written on many subjects for national publications; his latest book is an essay collection titled *Listening to the Page*. This event is free and open to all. No tickets or reservations are required. Information: [www.events.caltech.edu/0102/se.020422.shtml](http://www.events.caltech.edu/0102/se.020422.shtml).

### Ballroom Dance Mini Party

Winnett lounge, 9 p.m.—Open dancing; make requests or bring your own music. Refreshments provided, no partner needed. The first half-hour coincides with the merengue practice session.

## Tuesday, April 23

### Preschool Playgroup

Tournament Park, 10 a.m. to noon—Song and storytime, crafts and free play for toddlers and preschoolers (from walking to age 4). Information: (323) 550-8075 or [jmph-p@pacbell.net](mailto:jmph-p@pacbell.net).

### Caltech Tai Chi Club

Winnett lounge, 7:15 p.m.—Meets Tuesdays and Fridays weekly. Sessions are free. Information: [www.its.caltech.edu/~taichi/](http://www.its.caltech.edu/~taichi/).

### Caltech Folk-Dancing Club

Dabney Lounge, 7:30 p.m.—Meets every Tuesday until midnight. Drop-ins are welcome. Donations accepted.

### Intermediate Jazz Dance Class

Braun Gym, multipurpose room, 10 p.m.—Sponsored by the Caltech Dance Troupe, this intermediate lyrical-jazz dance class is open to members of the Caltech community with Athletic Center membership. Some prior dance experience is required. The cost per term is \$20 for Caltech students and \$30 for nonstudents.

## Wednesday, April 24

### Baby Furniture and Household Equipment Pool

234 S. Catalina, 10 a.m. to 1 p.m.—See Monday, April 22, for details.

### Wednesdays in the Park

Tournament Park, 10 a.m. to noon—Conversation and coffee for parents and caregivers, and playtime for children. Information: 744-9919 or [cdd@its.caltech.edu](mailto:cdd@its.caltech.edu).

### Faculty-Student Lunch for Women

139 Moore, noon—Female students are invited to attend an informal lunch with Erin Schuman, Caltech associate professor of biology, and Karen Parfitt, Pomona College associate professor of biology, to learn about their individual pathways to success, current research projects, and thoughts on women in science. RSVP [westclub@caltech.edu](mailto:westclub@caltech.edu).

### Emergency Preparedness Training

118 Keith Spalding Building, 3 p.m.—This course will describe the campus emergency operations plan, including information about the emergency operations center, evacuation, fire prevention and protection techniques, behavioral principles during an emergency, and personal preparedness. Reservations: 395-6727. Open to Caltech community members only.

### Ballroom Dance Club

Winnett lounge, 7:30 p.m.—East Coast swing for beginners, amateur-taught. If you missed the previous classes but have some dance experience, come anyway. Cost is \$1 per lesson, free for freshmen or those taking it for PE credit. No partner is required. Refreshments and a half-hour practice period will follow each class.

### An Evening with Michael Cunningham and Craig Marberry

Ramo Auditorium, 8 p.m.—Cunningham and Marberry’s *Crowns: Portraits of Black Women in Church Hats* is a book of photography and oral history containing 50 black-and-white photographs, accompanied by essays, that capture the link between women and the fashionable hats they wear to church. Each essay mentions a hat, but the essays delve deeper, exploring faith, family, and folklore. Admission is free, and no reservations are required.

## Thursday, April 25

### Men’s and Women’s Tennis

Ojai Tournament, at Ojai, 8 a.m.

### Caltech Architectural Tour

Athenaeum, 11 a.m. to 12:45 p.m.—Meet in the entry hall of the Athenaeum. Led by members of the Caltech Architectural Tour Service. Reservations: Susan Lee, 395-6327 or [suze@caltech.edu](mailto:suze@caltech.edu).

### Form Follows Function: Spring Dance Concert

USC, 7 p.m.—Members of the Caltech Dance Troupe will perform at a concert held by the USC School of Theatre. General admission is \$10, non-USC students \$7, USC students \$5. Information and directions: [www.usc.edu/info/calendar/](http://www.usc.edu/info/calendar/).

### Amnesty International Monthly Meeting

Caltech Y lounge, 7:30 p.m.—Amnesty International Group 22 holds its monthly meeting to discuss current activities and plans. All are welcome. Please join us if you have any interest in human rights issues. Refreshments. Information: (818) 354-4461 or [lkamp@lively.jpl.nasa.gov](mailto:lkamp@lively.jpl.nasa.gov).

## Friday, April 26

### Men’s and Women’s Tennis

Ojai Tournament, at Ojai, 8 a.m.

### Earth Day Fair

Winnett quad, 11:30 a.m. to 1:30 p.m.—Celebrate Earth Day with food, music, and lots of environmentally related local organizations, businesses, and Caltech clubs. Information: [www.its.caltech.edu/~cetfers/edf02.html](http://www.its.caltech.edu/~cetfers/edf02.html).

### Baseball

at Claremont-Mudd-Scripps, 3 p.m.

### Women’s Art Exhibit and Wine and Cheese Social

Dabney Lounge, 3 to 6 p.m.—The exhibit, sponsored by Women in Engineering, Science, and Technology (WEST), features the artwork of Caltech women. All members of the Caltech community are invited to attend the exhibit and social.

### Caltech Tai Chi Club

Winnett lounge, 7 p.m.—See Tuesday, April 23, for details.

### Form Follows Function: Spring Dance Concert

USC, 7 p.m.—See Thursday, April 25, for details.

## Saturday, April 27

### Men’s and Women’s Tennis

Ojai Tournament, at Ojai, 8 a.m.

### Coleman Chamber Ensemble Competition

Ramo Auditorium, 9 a.m. to 5 p.m.—The members of Opus One will be among the judges for this year’s competition, in which musical ensembles compete for more than \$13,000 in prizes. Begun in 1947 as the Coleman Auditions, the competition draws entrants internationally. Admission is free. Information: 395-4652, 1 (888) 2CALTECH, or [events@caltech.edu](mailto:events@caltech.edu). Individuals with a disability: 395-4688 (voice) or 395-3700 (TDD). Visit Public Events at [www.events.caltech.edu](http://www.events.caltech.edu).

### Track and Field

SCIAC Championships, at Claremont-Mudd-Scripps, 10 a.m.

### Intermediate Ballet Class

Braun Gym, multipurpose room, 1 p.m.—The Caltech Dance Troupe offers free intermediate ballet classes to members of the Caltech community with Athletic Center membership and/or student ID.

### Lily Cai Chinese Dance Company

Beckman Auditorium, 8 p.m.—Elegant, sensual, and captivating, the Lily Cai Chinese Dance Company melds ancient Chinese forms with modern dance in an artistic and inventive marriage of styles. Tickets and information: 395-4652, 1 (888) 2CALTECH, or [events@caltech.edu](mailto:events@caltech.edu). Individuals with a disability: 395-4688 (voice) or 395-3700 (TDD). Visit Public Events at [www.events.caltech.edu](http://www.events.caltech.edu).

## Sunday, April 28

### Men’s and Women’s Tennis

Ojai Tournament, at Ojai, 8 a.m.

### Track and Field

SCIAC Championships, at Claremont-Mudd-Scripps, 10 a.m.

### Skeptics Society Lecture

Baxter Lecture Hall, 2 p.m.—“How the Universe Got Its Spots,” Janna Levin, advanced fellow, applied mathematics and theoretical physics, Cambridge University. Donation is \$8 for non-members, \$5 for members and non-Caltech students. Free to the Caltech/JPL community. Tickets and information: 794-3119 or [skepticmag@aol.com](mailto:skepticmag@aol.com). Book signing to follow the lecture.

### Coleman Chamber Ensemble Competition Winners Concert

Ramo Auditorium, 3:30 p.m.—Winners of the Coleman Chamber Ensemble Competition will perform. Admission: \$10 for adults, \$5 for students. Tickets and information: 395-4652, 1 (888) 2CALTECH, or [events@caltech.edu](mailto:events@caltech.edu). Individuals with a disability: 395-4688 (voice) or 395-3700 (TDD). Visit Public Events at [www.events.caltech.edu](http://www.events.caltech.edu).

### Amnesty International Book Discussion Group

Vroman’s Bookstore, 695 E. Colorado Boulevard, 2nd floor, 6:30 p.m.—This month’s book, *Three Apples Fell from Heaven*, by Micheline Aharonian Marcom, is a novel about the Armenian holocaust during World War I. All are welcome, even if you haven’t read the book.

## Monday, April 29

### Baby Furniture and Household Equipment Pool

234 S. Catalina, 10 a.m. to 1 p.m.—See Monday, April 22, for details.

### Track and Field

SCIAC Championships, at Claremont-Mudd-Scripps, 10 a.m.

### Ballroom Dance Club

Winnett lounge, 7:30 p.m.—See Monday, April 22, for details.

### Ballroom Dance Mini Party

Winnett lounge, 9 p.m.—Open dancing; make requests or bring your own music. Refreshments provided, no partner needed. The first half-hour coincides with the merengue practice session.

### Beginners’ Hip-Hop Dance Class

Braun Gym, multipurpose room, 10 p.m.—Hip-hop classes, professionally taught, sponsored by the Caltech Dance Troupe. Fees: trial class, \$5; students, \$20 per term; nonstudents, \$30 per term. Attendees must have a valid gym ID or student ID. To register, e-mail [troupe@caltech.edu](mailto:troupe@caltech.edu).

## Tuesday, April 30

### Preschool Playgroup

Tournament Park, 10 a.m. to noon—See Tuesday, April 23, for details.

### Caltech Tai Chi Club

Winnett lounge, 7:15 p.m.—See Tuesday, April 23, for details.

### Caltech Folk-Dancing Club

Dabney Lounge, 7:30 p.m.—See Tuesday, April 23, for details.

### Intermediate Jazz Dance Class

Braun Gymn, multipurpose room, 10 p.m.—See Tuesday, April 23, for details.

## Wednesday, May 1

### Baby Furniture and Household Equipment Pool

234 S. Catalina, 10 a.m. to 1 p.m.—See Monday, April 22, for details.

### Wednesdays in the Park

Tournament Park, 10 a.m. to noon—See Wednesday, April 24, for details.

### Laser Safety Orientation

118 Keith Spalding Building, 11 a.m.—All laser operators and individuals working in areas where there may be exposure to laser radiation from Class 3b or Class 4 lasers are required to attend this training. Class size is limited; please call 395-6727 to reserve a space. Open to Caltech community members only.

### Ballroom Dance Club

Winnett Lounge, 7:30 p.m.—See Wednesday, April 24, for details.

## Friday, May 3

### Campus Emergency Drill

Student houses and the athletic field, 3 to 5 p.m.—Health Services will be staging a drill of its portion of the Campus Emergency Plan, designed to test the campus response to a mass casualty incident.

### Caltech Tai Chi Club

Winnett lounge, 7 p.m.—See Tuesday, April 23, for details.

### Falun Dafa Workshop

125 Baxter, 7:30 p.m.—This free workshop includes video documentaries explaining what Falun Dafa (also known as Falun Gong) is and why it is persecuted in China, as well as five sets of Falun Gong exercises.

### Capitol Steps

Beckman Auditorium, 8 p.m.—The Capitol Steps are congressional staffers-turned-comedians who travel the country satirizing the very people who once employed them. Tickets and information: 395-4652, 1 (888) 2CALTECH, or [events@caltech.edu](mailto:events@caltech.edu). Individuals with a disability: 395-4688 (voice) or 395-3700 (TDD). Visit Public Events at [www.events.caltech.edu](http://www.events.caltech.edu).

## Saturday, May 4

### Track and Field

SCIAC 10,000/Heptathlon/Decathlon, at Occidental College, 10 a.m.

### Intermediate Ballet Class

Braun Gymn, multipurpose room, 1 p.m.—See Saturday, April 27, for details.

### Capitol Steps

Beckman Auditorium, 8 p.m.—The Capitol Steps are congressional staffers-turned-comedians who travel the country satirizing the very people who once employed them. Tickets and information: 395-4652, 1 (888) 2CALTECH, or [events@caltech.edu](mailto:events@caltech.edu). Individuals with a disability: 395-4688 (voice) or 395-3700 (TDD). Visit Public Events at [www.events.caltech.edu](http://www.events.caltech.edu).

## Sunday, May 5

### Opus One

Beckman Auditorium, 3:30 p.m.—Opus One performs Haydn’s Trio in G Major, the “Gypsy Rondo”; the Los Angeles-area premiere of Hartke’s “Meanwhile”; and Dvorák’s Quartet in E-flat Major for Piano and Strings, Op. 87. Tickets and information: 395-4652, 1 (888) 2CALTECH, or [events@caltech.edu](mailto:events@caltech.edu). Individuals with a disability: 395-4688 (voice) or 395-3700 (TDD). Visit Public Events at [www.events.caltech.edu](http://www.events.caltech.edu).



### Credit Union, from page 1

members save, others are able to borrow from the pooled resources. With a volunteer board of directors and no stockholders to answer to, credit unions exist solely for their members' benefit. "Profit changes motives," Harris points out. "But the credit union is truly a cooperative concept—people helping people. It makes a big difference."

In that spirit, following passage of the 1934 Federal Credit Union Act, seven Caltech colleagues founded the CEFCU in 1950. More than five decades later, the credit union continues focusing solely on the Caltech-JPL community, including employees' families, organizations with close ties such as the Huntington, and independent Caltech-JPL contractors—another way in which it stands out from the crowd, Harris notes. "Other credit unions have been pressured to branch out" in membership, "but we see our purpose as serving the distinct common bond of Caltech-JPL."

Instead, the CEFCU focuses on providing high returns along with financial security and personal care. "Value and service are landmarks of what we do," Harris says, "but safety and security are as well. People like our conservative approach to investing." He explains that with credit union investments federally restricted to government-backed or insured securities, the CEFCU tends to attract "savers" (the average member has an account balance of \$18,000), who seek high dividends while maintaining stability and liquidity. Particularly in the recent economic downturn, CEFCU has been able to offer a consistent savings rate higher than many certificates of deposit and other accounts affected by the market.

Thus, despite the exclusivity of its customer pool, last year the CEFCU saw its deposit base balloon from an average of 9 percent yearly to 21 percent, due to falling returns elsewhere. Its \$500 million in assets puts it in the top 2 percent of credit unions nationwide, and it currently employs 54 staff at three branches, with nearly 28,000 accounts. Members include past as well as current Caltech-JPL affiliates—"once a member, always a member" is the motto.

Harris believes that selective service has also been a main key to success. "We've chosen a different path than other credit unions," he explains. "We don't want to be everything to everyone. For example, checking is a very costly program with a lot of losses. We probably can't do it better than others, and we're able to generate better returns by not doing it." This prudence helps the CEFCU keep its operating expenses to

just 1 percent of average assets—a third of the average credit union expenditure of more than 3 percent. Surveys have shown that members appreciate the merits of the niche-oriented approach and its resulting higher dividends and lower loan rates.

Still, Harris says, the credit union has to remain competitive and keep up with the times: "We realize we have to live within a changing world. We're changing too, but trying to do it systematically and selectively." So in 1989 the CEFCU began an ATM card program that has seen "phenomenal" growth, to almost 12,000 transactions each month; other services since added include a Visa card, online banking from home, and electronic monthly statements (eStatements).

With lending rates falling, the CEFCU has also increased its mortgage loan activity in recent months. One of the most popular is a five-year reprice, a very low-interest 30-year amortized loan on which the rate can change every five years. "This loan has been created to give our members superior terms and added value," says Harris. Other products include a home equity line, vehicle loans, and low-interest share-secured loans, to name just a few. Harris prefers focusing on short-term reprice loans that stay in the CEFCU's portfolio, as opposed to 30-year fixed loans, usually sold into the secondary market. "I would rather invest in members than in Fannie Mae," he says.

Despite the record growth, Harris isn't content to see the credit union rest on its laurels, and he hopes to spread even more widely the CEFCU's message of "We are different." A cooperative effort, after all, can only benefit from increased participation. "Our true success is our members," he says. "It's only through their confidence and cooperation that we can keep growing. They should be proud—it's because of them that we've achieved all these things."

For more information and branch locations, visit [www.cefcu.org](http://www.cefcu.org).

•



## New phones upgrade security

Standing silent guard like blue-lighted sentries, new emergency phones have replaced the old ones, enhancing safety on campus by virtue of their visibility, according to Gregg Henderson, Caltech's chief of campus security.

"The reason they're much more visible is that they're 10 feet tall and they have a very bright blue light at the top that strobes when it's activated," he said.

"At night if you were to stand at the Athenaeum and look down the Olive Walk, you would be able to see every phone all the way to Millikan," Henderson added.

Aside from being more conspicuous, the devices are easy to use. There is no handset, just a button that, once depressed, connects the caller immediately with campus security headquarters, where an officer is on duty at all times.

Although they are scattered campus-wide, the phones are concentrated near the student houses, the graduate housing complexes on Catalina, and the parking lots.

"We've gone through and replaced the old ones, and we've added one between the Administrative Technology Center and the Financial Services Building on Chester Avenue," Henderson said.

A phone will be installed where the old fire station once stood, which will become a parking lot, and when construction is completed on the Broad Center, a new phone will be placed in that area as well, he said. The ATC and the two parking structures on Wilson Avenue got the wall-mounted models. Once installation is completed, the campus will have a total of 20 emergency phones.

According to Henderson, the price for each unit and its installation ran about \$5,000, a small price to pay for an upgrade to Caltech's safety infrastructure and the peace of mind it brings.

•

## Drill to test Caltech's emergency preparedness

How well would Caltech be prepared to respond in the event of a major medical emergency? The campus will soon find out by participating in a simulation drill on Friday, May 3, from 3 to 5 p.m.

The Institute will be testing its ability to handle numerous injuries following an event as severe as a 7.5 earthquake in the San Gabriel Valley. Students portraying the injured will be evacuated from buildings north of California Boulevard to across the street. Those representing the walking wounded will be ushered to the tennis courts, and others will be moved on backboards to the north and south athletic fields.

"We want to let people know that the students will be dressed up like they're injured," so that onlookers won't freak out, says safety engineer Jennifer Sorenson, who is coordinating the drill.

Campus departments taking part in the drill will be Environmental, Health, and Safety Services; the Student Health Center; the Security Office; Residence Life; and the Student Counseling Center. In addition, the Pasadena Fire Department and the American Red Cross will serve as observers and will help critique the response plan.

For more information, contact the Safety Office at ext. 6727 or [safety@caltech.edu](mailto:safety@caltech.edu).

•

# Caltech 336

T E S S M T W T F S S M T W

The campus community biweekly  
April 18, 2002, vol. 2, no. 8

Editor: Daryn Kobata  
(626) 395-6240; [daryn@caltech.edu](mailto:daryn@caltech.edu)  
Assistant Editor: Javier Marquez  
(626) 395-6624; [jmarquez@caltech.edu](mailto:jmarquez@caltech.edu)  
Calendar Administrator: Debbie Bradbury  
(626) 395-3630; [debbieb@caltech.edu](mailto:debbieb@caltech.edu)  
Graphic Artist: Doug Cummings  
Photographer: Bob Paz  
Published by the Office of Public Relations

California Institute of Technology  
Pasadena, California 91125

ADDRESS SERVICE REQUESTED