

The California Tech

VOLUME C, NUMBER 24

PASADENA, CALIFORNIA

FRIDAY, APRIL 16, 1999

Dr. Garwin Lectures on Missile Defense

BY TECH STAFF

Is it feasible to stop a rain of nuclear terror before it strikes? Dr. Richard Garwin, at he Twelfth Lauritsen Memorial Lecture, believes that simple deterrence may be more powerful than any anti-ballistic missile system the United States develops. However, with recent development of tension between he U.S. and countries overseas, he House and Senate have pushed ahead with the deploynent of a National Missile Deense system.

On Wednesday night, Garwin lectured to the Caltech community on the rise of Inter-Continental Ballistic Missiles ICBMs) and current efforts to lefend against possible attack by hese weapons. With advances in nissile technology demontrated by North Korea, Iran and raq, the U.S. searches for a way o combat increaing accuracy ind advanced missile technology. Dr. Garwin scoffed at the need for armed defense, calling or continued preventative meaures, including but not limited 0:

(1) positive-pressure buildngs, to reduce death tolls from nissiles by a factor of 1000,

(2) keeping the ABM treaty of 1972, which limits the prolifration of interceptor defense nissiles, and

(3) treating countries as riends as opposed to enemies.

"A Prefrosh on all your Hovses!"

BY CHERYL FOREST

Welcome to Caltech! The prefrosh arrived today to a campus that was eagerly anticipating them. The 100 women and 155 men of the potential Caltech class of 2003 were greeted with the usual fanfare of balloons and happy faces. The morning was quite slow, but by the time the 3 PM shuttle came, Tech was crawling with curious high school seniors and their parents. Most hosts greeted their prefrosh with a cheery word and a tour of the campus.

The keystone of Prefrosh operations was once again the Registration Check-in on the R-F courtyard, next to the Olive Walk. There, undergraduate and admissions office volunteers aided Prefrosh with orienting themselves to the Caltech world. Prefrosh weekend shirts were handed out, and the standard packet of Prefrosh weekend fliers and schedules were distributed. Runners, working from 8am to 6pm, brought arriving Prefrosh to their hosts, and helped them to find rooms in the Student Houses.

The dinners in the student houses were the usual rambuctious affairs. Water flowed freely as numerous Caltech students took the heat off of their Prefrosh guests. Prefrosh were introduced to the rules of house dining in grand style.

The weekend promises to follow the typical "Prefrosh Weekend" prototype that's been tested in the fires of previous years. The Prefrosh will likely spend most of Friday exploring the academic parts of campus, with the possibility of lab tours and option sessions. Lunch will



be served in the student houses, which will be followed by a mass exodus of the student body to the International Day Fair that will be occuring on the Olive Walk. The Club Fair will occur from 2:30 until 4:00, and the prefrosh are heartily encouraged to sell their souls to some organization prior to actually coming to Tech such that they can immediately start flaming out. The performing arts showcase will start at 7 PM, and feature performances by the guitar class, the Chamber singers, the jazz band, the band and the chamber ensemble program. Events continue through the weekend, with house-sponsored events in the evening on Saturday.

View the Prefrosh on p. 6-7.

Prof. Kirschvink reveals secrets of Martian rocks Mislabeled extraterrestial rocks reveal hints at bacterial life on Mars

BY TIM RAUB

From Houston to Harvard and from nearby UCLA to even nearer-by Kirchoff lecture hall, Caltech geobiologist Joseph Kirschvink is captivating audiences and challenging their preconceptions with a remarkable line of reasonoing that leads to what, on an intuitive level, seems incredible: that bacterial life existed on Mars 4.0 billion years ago. When scientists at McMurdo Base in Antarctica discovered a small, potato-shaped black rock poking out of the ice-capped Allan Hills in early 1984, they knew at first glance it was a meteorite. The Hills, which are rebounding isostatically as the West Antarctic Ice Sheet recedes, ablate rapidly in the hundred mile-an-hour wind gusts that pound the continent, regularly exposing meteorites that fell to Earth and were buried in the ice in past eons. The scientists, however, had no inkling of the controversy that their particular little meteorite would someday cause. Like a scene out of an Indiana Jones adventure, the meteorite was shipped back to the United States but then thin sections were mixed with those from another terrestrial meteorite. For eight years, the Allan Hills meteorite sat on a shelf at the Johnson Spaceflight Center in Houston and collected dust.

Then in 1992, Allen Triemann of the Lunar and Planetary Institute at the Johnson Space Center analyzed the abundance of the oxygen-17 isotope that was trapped in the true ALH meteorite --- to his own shock, the concentration was exactly what would be expected of a Martian meteorite and not like that of a terrestrial stone at all. A little detective work uncovered the paperwork mistake, and the ALH84001 meteorite was "reborn," joining an exclusive club of only 13 tiny rocks on our planet that once called Mars their home. In 1996, David McKay and colleagues, including Kathie Thomas-Kleptra from Florida and Hojotollah Vali from McGill University in Canada, revealed a stunning conclusion that they had worked on for nearly two years under a strict vow of secrecy: when viewed under a scanning eletron microscope, thin sections of the meteorite showed what looked like "nanofossils" resembling Earth bacteria! One picture in particular, which seemed to

show a segmented "worm" fossil in a groove inside ALH84001, caused corporate executives across the nation to spit out their first sip of coffee after just one look at the morning Times. McKay et al. also found large carbonate globules ringed with ironrich magnetite — in terrestrial rocks, both features are indicative of geobiological activity.

Since then, more than a hundred papers studying ALH84001 "dead," and Science magazine recently published a two-page spread entitled, "Requiem for Ancient Life on Mars." Indeed, of the five lines of persuasion used in the original McKay paper, four have been reduced to a status which can neither support nor disprove their initial hypothesis.

The fifth line of reasoning has only grown stronger, though thanks in no small part to Caltech professor Joseph Kirschvink. Kirschvink is a geobiologist who specializes in paleomagnetism and major biotic events in the Earth's geologic history, including the origin of life on Earth. Together with graduate student Altair Maine, he obtained a small subsample of the Allan Hills meteorite. In a 1997 Science paper, PLEASE SEE MARS ROCKS ON PAGE 2

n Garwin's opinion, "Deterence remains the primary deense against ICBMs."

In addition to covering curent actions regarding ballistic nissile defense, Garwin gave an n-depth history of the evoluion of missile defense systems, rom the V-2 rockets in WW2 to he deflated "Star Wars" initiaive of President Reagan. The primary turning point in the esalation of "mutual assured detruction," a policy of mutual irms buildup for retaliatory deense, was the Anti-Ballistic Missile Treaty of 1972. This reaty limits the U.S. and Rusia to a maximum of one hun-Ired anti-ballistic interceptors protecting one key location.

Although threats from ad-PLEASE SEE MISSILES ON PAGE 2 have been published in peer-reviewed journals. Some have supported McKay's startling proposition. Most have not. In the press and at scientific conferences, the martian meteorite question has prompted often-heated debate. Last August, the USA Today pronounced the idea of nanofossils

IN THIS ISSUE				
THE USUAL STUFF	This Week's Features			
Announcements	PREFROSH6-7 Sports Sports Sports4-5 ASCIT, IHC, Budget8			

News

Off-Campus Picks system revised by IHC, Avery Council

1 -> n

n+1 -> n+k

n+k+1 -> n+k+j

 $n+k+j+1 \rightarrow total$

the other three options 1, then

they are not eligible for the

House cardpicks. That student

will have to wait to pick a room

in the one of the remaining Lot-

Marks Lotteries will occur in 4

rounds until the rooms are filled

up. There will be three picking

lists that are generated by

Reslife. These three lists corre-

spond to each of the three Lot-

teries. Each list will have four

tiers. The first tier in each list

will be comprised of those stu-

dents who ranked that Housing

option 1. The order within this

first tier will be determined ran-

domly. Each subsequent tier of

the list will be generated in a

similar manner. Thus a picking

The Apartments, Avery, &

teries.

Off-Campus Picks: The Trickle Down Scheme

total = total number of students

1st Tier =

2nd Tier =

3rd Tier =

4th Tier =

n = number of people who ranked this Housing option 1

k = number of people who ranked this Housing option 2

j = number of people who ranked this Housing option 3

list for a Housing Option will

look like the setup to the right.

a room in one of the Houses, are

automatically taken off the three

Apartments, Avery, & Marks

Lotteries, Residence Life will

call names in order from the

picking lists only from the first

tier. During the second round

they will call names from the

picking lists only from the 2nd

tier and so on, until all the rooms

only one room, but he/she is not

obliged to pick any room. Once

a student picks a room, then that

student is removed from the

other lists. Roommate(s) can be

A student is allowed to pick

picking lists.

are filled up.

Those students who picked

During the first round of the

BY JAIDEEP SINGH, MARIE FOX AND ANDREW STRAUSS

In the past decade, there has been considerable change in the housing possibilities avaiable to Caltech undergraduates. The process of assigning housing space has not changed significantly to meet these new circumstances, frequently causing participants more confusion and uncertainty than necessary. With this in mind, the old on-campus and off-campus lottery systems have been scrapped in favor of a new comprehensive housing lottery.

April 16, 1999

The purpose of this new lottery system is to effectively house students according to their preferences - ie. if a student wishes to live in a particular building, the lottery will give that student the best opportunity possible to live in that building. The new housing lottery will not change the individual house picks processes that occur in the Seven Hovses however - they will merely become fully autonomous parts of the new Housing Lottery.

Next week, each student should get a Lottery Card and a

Housing brochure. The Lottery Card (or Card for short) will have a list of Housing facilites that each student will be asked to rank. These options are Avery, Marks, the Apartments (1170 Del Mar and 150 S. Chester), and the Houses. All four options should be ranked 1 through 4 with no repeating (meaning no two options should not be ranked the same). The Cards will be due back about 2 weeks after they are sent out.

If a student ranked the Houses 1, then they are eligible to enter the House cardpicks. When the House roompick occurs, that student will have the option to pick a room. The rooms available in the House roompick will be rooms in that House plus any House-affiliated off-campus alleys. If a student does pick one of those rooms, then that student is done. If that student doesn't pick a room, then that student is still eligible to pick a room in one of the remaining Lotteries (Apartments, Avery & Marks).

If a student ranked any of

from Mars as meteoric envoys Mars Rock also gains credence.

CONTINUED FROM PAGE 1

the two obtained a record of the magnetism of the meteorite that showed conclusively that the carbonate globules had never exceeded 100 degrees Celsius since the meteorite had been most recently shocked - 4.0 billion years ago, when it was still on Mars! Now, satellite photographs of Martian topography show what planetary scientists claim are likely water-eroded canyons and riverbeds on the planet's surface. If liquid water did exist on the Red Planet a mere half billion years after the solar system had congealed, and if Mars possessed a magnetic field at that time (the Moon did), then magnetotactic bacteria could have evolved without much difficulty at all. If that meteorite, then, was transported to Earth without appreciable heating in its core, bacterial fossils such as those proposed to exist in the Allan Hills meteorite could indeed have survived the 15 million-year voyage from Mars to Earth. In fact, observes Kirschvink, if bacterial fossils on the ALH meteorite do gain support someday, then the theory that the very first life on Earth come

Kirschvink has encountered understandable skepticism from the scientific community, although each time he gives a seminar at a university or a conference, the balance of opinion seems to shift just a little bit. Last Friday, Kirschvink gave his famous lecture to the freshmen in Bi1 and assigned them a homework problem calling for back-of-the-envelope calculations that made a strong statement about the ALH84001 magnetofossils. By "magnetofossils," Kirschvink means that many of the iron-oxides that surround the carbonate globules are in fact tiny crystals of magnetite, analogs to magnetite crystals found inside membrane-bound vacuoles in many

teria, honeybees, and humans The theory of biosynthetic magnetite itself has roots in Caltech history: Heinz Lowenstam, for many years Caltech's resident paleontologist, discovered magnetite crystals in chitin teeth in 1962. More recently, scientists have discovered several genera of bacteria that synthesize magnetite crystals and form them into chains that act just like a long bar magnet inside the

terrestrial animals, including bac-

bacterial cell. Functionally, the chains help an individual bacterium navigate in the Earth's magnetic field and find food. Kirschvink has six criteria by which he claims that the magnetite crystals identified on the Allan Hills meteorite were themselves formed by bacterial analogues long ago on a planet not so far away...

For starters, the magnetite crystals, which form linear chains up to 20 units long, exhibit extraordinary chemical purity. In the naturally-occuring mineral magnetite, scores of trace metals such as magnesium and titanium are incorporated into the chemical lattice; in ALH84001, however, there are generally fewer than a handful of "mistakes" per crystal. The crystal faces are also free from defects such as nicks and pores that regularly dot inorganic crystals. Membrane-controlled synthesis is one means of regulating chemical and physical crystal perfection. Kirschvink also notes that the magnetite crystals, which abound in the parts of the meteorite that surround the low-temperature carbonate, generally show one of three different morphologies. One of these morphologies is clearly inorganic in nature. This

is no surprise, since the crystals that exhibit this shape are neither chemically pure nor free from defects. The other two suites of crystals, though, are shaped in such a way that they do not form simple octahedrons, as do most inorganic magnetite. Instead, they have all the crystal faces that are expected in an octahedral configuration, but the six faces that surround a certain axis of the crystal are greatly elongated to a length that could never occur by simple diffusion. Kirschvink argues that the elongate crystals, which are considered to be characteristic of magnetotactic bacteria fossils in deep-sea sediments, can only form under biologicallymediated crystal growth.

Because the crystals are elongated in the single direction that increases their magnetization, Kirschvink suggests that evolution existed even in the dawn of our solar system and selected for bacteria that navigated for food based on a biomagnetic feedback system. It seems that Heinlein, Asimov, and Sagan may not have been so far in the fictional realm when they wrote stories of human and Martian coexistence. If the past is any key to the future, then today is an exciting time to be a planetary geobiologist.

pulled from anywhere for those rooms that require roommate(s). Students can enter any number of House roompicks for which they are eligible for, but those students can pick only one room (see IHC Resolutions III).

those students who ranked this Housing option 1st

those students who ranked this Housing option 2nd

those students who ranked this Housing option 3rd

those students who ranked this Housing option 4th

Questions or comments regarding the change and development of this new process should be directed to IHC and/ or the Avery Council. Please send all comments and questions to lottery@cco.caltech.edu.

Questions regarding dates, deadlines, housing availability, and other lottery logistics should be directed to Residence Life (x6194).

THE CALIFORNIA TECH Caltech 40-58, Pasadena, CA 91125 editorial desk: (626) 395-6153 advertising desk: (626) 395-6154 editorial email: editors@tech.caltech.edu advertising email: adv@tech.caltech.edu ISSN 0008-1582 **VOLUME C, NUMBER 24** APRIL 16, 1999 EPITOR David Guskin BUSINESS MANAGER Lexi Baugher CIRCULATION STAFF Roger O'Brient Katy Isaacs Rick Karnesky SPORTS EPITOR Tim Raub PHOTOGRAPHER Erik Dill Kudah Mushambi

Kenneth Kuo

COPY EPITORS Nicholas Breen

FEATURE WRITERS Ron Dollete Justin Ho Daisy James Jason Meltzer Jean-Paul Revel Dave Tytell

STAFF WRITERS Cheryl Forest

Tanya Tickel

APVERTISING MANAGER Gerald Palmros

Elisa Chiang Erik Dill Hannah Kim Autumn Looijen Shanti Rao Kevin Scaldiferri

Roger O'Brient

Shannon Stewma Adam Villani

COMICS EPITOR

CONTRIBUTORS

MISSILES

CONTINUED FROM PAGE 1 vancing missile technology overseas increases, Dr. Garwin remarked that defense systems are still inefficient and unreliable. Garwin explained that the most desirable way to disable incoming missiles is with "hitto-kill" defensive measures that hit in the boost phase rather than over the target protected. However, Patriot missiles used against SCUDs in the Gulf War had no more than a 10% success rate, and some missiles come equipped with "warhead balloons" that reduce the chance of physical impact by anti-missile measures.

Garwin hopes that the U.S. will not abandon preventative measures to stop ICBMs. While expensive technology may provide semi-reliable countermeasures, communication and deterrence may succeed where "mutual assured destruction" cannot.

CORRECTION

The Letter to the Editor that ran in the 04-09-99 issue of The California Tech, entitled "Caltech Sinks into Decadence," had two authors, not one as printed. The co-authors of the letter were Amit Kenjale and Peter Gerdes.

MINTS	APVISER		
Loren Hoffman	Hall Daily		
PEAPLINES			
Advertising: 5 p.m. Mo			
Announcements (Mints):	noon Monday		
Letters to the Editora	6 p.m. Tuesday		
Unsolicited Articles	noon Monday		

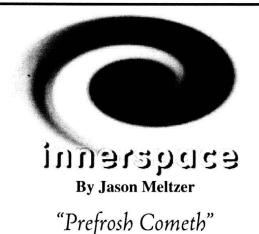
Published weekly except during vacatio and examination periods by the Associated Students of the California Institute of Technology, Inc. The opinions expressed herein are strictly those of the authors and advertisers.

Letters and announcements are welcome. All contributions should include the author's name and phone number and the intended date of publication. Submit copy (preferably on Macintosh 3.5" disk) to the Tech mailbox outside SAC room 40, or e-mail editors@tech.caltech.edu. The editors reserve the right to edit and abridge all submissions for lit eracy, expediency, etc. All articles are the propert of the authors. Authors and columnists retain all in tellectual property rights.

Advertising should be submitted as camera ready art, but the Tech can also do simple typeset ting and arrangement. All advertising inquiries should be directed to the business manager. For email, please use business@tech.caltech.edu. Dono send ad inquiries to the editors.

For subscription information, please send mail to "Subscriptions" or call (626) 395-6154.

Printed by News-Type Service, Glendale Copyright 1999, ASCIT. You don't know the full power of the dark side



It's Prefrosh time again: a the rest of it. It isn't a question time for prospective students to examine Caltech and determine if it's the school for them. Keeping with the spirit, this week's column is written for the Prefrosh. As most frequent readers of Innerspace know, my writing is often fairly cynical and occasionally even has a ouch of sarcasm. This week, though, to help all of the possibly confused Prefrosh, I promse to be sincere. Really, I promise!

For those of you still reading (and haven't yet skipped diectly to Dilbert), I will reward your patience to the best of my bility and try to give you some information about Caltech that u might not learn otherwise is weekend. Some of it is good, me is bad, but all of it is part Caltech, at least in one udent's estimation.

I've been asked by various rospective students many ings about Caltech, including ademics, research, social life, ubs, the environment, the city, ther students, and just about nything else you can think of. ut often, students don't know hat they *should* be looking for a school. People have asked, is it valid to judge a school by s social life?" The answer is es, it's valid, but only if you ink it's valid. You can judge a ollege by its student to sheep atio if you want, but most tople aren't that depraved (at ast not entering students). The oint is, you must learn what is aluable to you in a college, beause the choice you make will etermine at least the next four ears of your life and influence of money or a school's reputation: even if you're netting 10k per year in grants (a not-so-unrealistic situation for some students in other schools) or if your school is #1 in everything, it won't matter much if you can't stand the place! So make sure you know what your objectives are and what's most valuable to you before making any life changing decisions, like what college you will attend.

As far as Caltech is concerned, let's start with some overall impressions. Believe it or not, I really like Caltech. Given the chance to go back and make the decision all over again knowing what I know now, I would definitely choose Caltech over any other school. The main reasons are the same that you'll no doubt hear countless times this weekend: the Honor System, the Houses, the opportunities for involvement, and the availability of research. All of these things really do make Caltech a great place to go to school. Where else can you take your tests in your room while your roommate plays with Linux? Where else can you skip all of your classes, learn a lot, and still have a good GPA? (Yes, I know people who do this.) Where else can you expect the dominant form of communication to be e-mail or ICQ? And at what other school will you find that doing problem sets is the major social activity on Sunday nights? All of this is thanks to the freedoms and responsibilities that are given to Caltech students. I am sure — unless you play Starcraft for your entire

News

Prefrosh experience — that you will no doubt hear much about these aspects of the Caltech experience. So I will elaborate on some others that are of interest to me, and possibly you.

Work Load: Caltech has excellent academic programs, and you will probably learn far more than students at most other schools. The price of this quality, however, is more than tuition: it also takes time. That's why students here do so much work. According to surveys and rankings (like the one's I'm sure all of you have read), Caltech students do more academic related work than students at any other school. This might simply be because of the nature of the work (science often requires more time input to learn thoroughly than other subjects), or that Techers demand more of themselves, or that the Institute itself provides us with more to do. Don't misunderstand - students here do not work all the time, but it is a significant amount of time. Whatever the reason for this is, the fact remains, and you will have to decide for yourself if the commitment is worth it.

Social Life: Lots of people here complain about the social life. To be honest, compared to many other schools, Caltech does have a very low-impact social environment. We don't have wild parties every weekend, fraternities, a thousand clubs, or massive sporting events. If this is what you're looking for, then you won't find it at Caltech. There are, however, many positives that arise from not having the typical college social scene. When it comes to participating in activities, everyone has a chance if they want one. You can be active and hold positions of leadership in as many or as few organizations on campus as you want. At other schools, it's hard to be very involved, because there are often many other people involved in the same activities. This applies to sports, student government,

clubs, and research. If you want to be on the basketball team, for example, you probably can, even without much experience. Sure, you might not win, but you can play if you want to. Think I'd be writing this column for publication in the school newspaper at any other school? Instead of frats, we have Houses, which are by nature more inclusive. Some people criticize the House System for various drawbacks, but ultimately it's a very positive aspect of Caltech's social life. And while we don't have parties every weekend, people spend a lot of time on the few we do have. Prefrosh Weekend is a good time to find out what social life is like here, so take advantage of it. It might not be the most accurate impression, but it's probably the best one you can get.

Research: There are so many more opportunities for research at Caltech than at any other college. This is, primarily, a research institution, meaning all of the faculty are involved in scientific research. Most of them need help, and undergraduates are a great source of inexpensive assistance. This situation works wonderfully for both students and faculty --- the students have the chance to participate in research that suit their interests and the faculty have enough staff for their projects. I started doing research in astronomy the second term of my freshman year, was paid well, and was using professional telescopes on Mt. Palomar by that summer (and I'm not even an astronomy major). Summer research is very popular and, thanks to SURF, not too difficult to find. Ultimately, if you're interested in scientific research as an undergraduate, Caltech is the place to be.

The Ratio: The male:female ratio, that is. This is a constant source of difficulty in the Caltech undergraduate community. While this may not be the most consequential part of your decision making process, it is an important aspect of life at Caltech. For some, it's mildly annoying or unnoticed, but for others it can be the defining element of their Caltech experience. One of my friends believes that "the ratio is the only thing wrong with social life at Caltech." I wouldn't take it that far. Unlike my other comments, there's not much good to say about the ratio. Maybe it's good for women at Caltech, and many of my female friends attest to that. True, it's easier for them to find boyfriends, but they also often lack having many other close friendships with women. The ratio perhaps the most obvious problem with Caltech's undergraduate life, and just like any other element of your decision, you will have to decide how important it is to you.

Before this column gets much longer, I'll stop going over specific details of the Caltech experience. I've given a few positive and negative aspects of life here, and they are by no means the extent of it; they are the few details that happened to cross my mind while writing. You can never learn all there is to know about a school by one visit or by reading one article about it, but remember to keep in mind everything you do learn this weekend and use it to make a well-informed decision. I also urge you to do the same with all the other schools that you may visit. The decision really does matter, and if you choose right, your college years can be very rewarding. Caltech, like any other school, is good for those students who want to be here. If you still want to come to Caltech, even after experiencing it first hand, then I urge you to do so! You probably won't regret it.

And there are no sheep here as far as I know. Sorry!

Jason is a second-year undergrad at Caltech, for all you Prefrosh out there. His column "Innerspace" is featured in the Tech every once in a while - stay tuned for further installments.

The Outside World

by Erik Dill

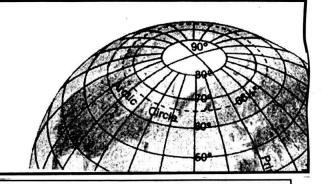
Kosovo - The NATO air campaign has gone on for 24 days. On Thursday, Serbian officials showed photos of several refugee groups allegedly hit in the bombing. NATO officials acknowledge that some refugee groups were targeted accidentally, while blaming other casualties on Serb forces.

Florida - Wildfires, fanned by high winds, have burned almost 5,000 acres. Several areas have been evacuated, and dozens of homes destroyed.

Central Asia - Last Sunday, India tested an intermediate range surface-to-surface ballistic missle. Pakistan followed with a similar test Thursday. Both missles are capable of carrying nuclear weapons, which both India and Pakistan successfully tested last fall.

Bogota, Columbia - Up to 40 people, including several Red Cross, Civil Defense, and municipal rescue workers, were killed in a mud slide as they tried to rescue victims of a smaller slide. Columbia has been subjected to unusually heavy storms, which are being blamed on the La Nina phenomenon.

Angola - On Wednesday, the UN Security Council expressed concern over the deteriorating situation in Angola, blaming UNITA rebels. Food supplies are rapidly decreasing, resulting in extensive shortages, and a polio epidemic has begun around the capital city, Luanda.



The Fremont Centre Theatre presents The Life and Times of A. Einstein a comedy by and with Kres Mersky directed by Paul Gersten "a glimpse into the life of Einstein as seen through the eyes of his secretary, Ellen." Sundays @ 7PM/Tix \$15/ w/Student ID \$10 1000 Fremont Avenue, South Pasadena tel:888-441-5979/626-441-5977 "A tour-de-force, Mersky is marvelous." Variety

Sports

Tennis gears up for SCIAC

Team has high hopes after crushing Whittier in conference match

by Gerald Palmrose

Last Friday, the Beavers won their second conference match when they demolished Whittier 7-0. Clearly more battle-tested, the Beavers never took the foot of the gas pedal and had strong performances from all players.

The match figured to be close after the Beavers won the doubles 2-1, but in almost all of the singles matches, a Caltech player was tearing his opponent apart. The top three of Matt Musick, Eric Sherer, and Jason Wong all won their first sets 6-0 in less than 25 minutes.

The rest of the match seemed to validate the fact that the Beavers have improved significantly since the beginning of the year, as each player continued the good play and focus.

However, the Beavers lost a close one last Saturday, when they lost to Occidental 4-3. But there was very little weeping over the outcome of that match, because of the extremely fine effort expended by the Beavers.

The match started with the winning of the doubles point, with wins from #2 Eric Sherer/ Jason Wong and #3 Chris Leapley/Gerald Palmrose. Amazingly, #2 was faced with match point, but a high-risk, high velocity second serve from Jason Wong handcuffed the opponent and #2 then went on to win the match.

Next, the team put out its singles lineup, and for awhile it looked as if the match was winnable. Three players won their first sets, but only two, Leapley and Palmrose, went on to win their matches.

It came down to the last match to be finished, which was #1 singles. Representing Caltech was Matt Musick, who had beaten Whittier's #1 a day earlier 6-0, 6-2. Musick lost the first set 6-4, even though he was definitely the aggressor in the match. The second was very similar to the first, in that Musick repeatedly beat the odds by breaking his opponent's serve, but then could not consolidate the breaks by holding his own serve. The final score was 6-4, 6-4.

Finally, last Wednesday the Beavers lost a match against non-conference rival Chapman 5-2. The two wins came from the bottom of the lineup, as Doug Baker won at #5 singles 6-4, 6-1, and Anthony Guerrera won at #6 6-0, 6-0. It was certainly a good sign for the tennis team to have two up and coming freshmen pick up solid victories.

Going into SCIACS, the Beavers find themselves in a rough spot, being pitted against Pomona College. However, if the Beaver men can play up to their potential, they may advance to play Harvey Mudd in the second round. If not, they will probably play La Verne again in the consolation bracket and then perhaps Cal Lutheran and hope for a 5th place finish. And that ain't bad for a team that will return 5 of its 6 top players next year. Track and Field Coach W. L. Stanton, ca. 1927:

"Training rules for the week [of the conference meet]: a) 9 hours sleep, if possible and b) Diet: for breakfast, no warm biscuits, fresh bread, nor hotcakes. For lunch (light), no coffee, pie, cake, or rich pastries. Soup, meat, salad, vegetables, milk if desired, toast if possible. Light dessert. NO ICE CREAM.

Track and Field Coach Jasper Simon, ca. 1999:

"And especially no marshmellows!"

Caltech Sports Records, 1998-1999

Sport:	Record (Conf.):
Men's Cross Country	2-5
Women's Cross Country	1-6
Women's Volleyball	4-17 (0-4)
Men's Soccer	2-45 (2-8)
Men's Water Polo	1-11 (0-6)
Men's Fencing	4-6
Women's Fencing	1-8-1
Men's Swimming and Diving	6-3 (3-2)
Women's Swimming and Diving	4-5 (2-3)
Men's Basketball	2-21 (0-15)
Women's Basketball	3-14 (0-7)
Men's Tennis	2-13 (2-8)
Women's Tennis	6-10 (3-4)
Men's Baseball	4-18 (0-15)
Men's and Women's Track and Field	0-a lot
Men's Golf	0-4

Timothy Downes assumes responsibility of Athletics

Athletic Director enjoys interview with the Tech, but moans over insufficient time for smoothie consumption

BY TIM RAUB

In his first day as Athletic Director, Tim Downes found himself confronted by an executive decision calling for both mental discipline and physical exertion. From Downes' desk in his northeast-facing office, he had captivating views of the towering San Gabriels, dusted by their first real snow of the season — like many Techers, he was fascinated by the beauty of the mountains. With perhaps a wistful glance, Tim Downes got up and rearranged his furniture so that his desk faced the door to the southwest. Recently, Downes took the time to meet with the California Tech and talk about his vision for Caltech's athletic future.

Tech: What led you to first consider Caltech?

TD: Its academic reputation. The quality of education was similar to schools where I had been before — for example, Johns Hopkins. I think the reasons why I looked for a Division III school were very philosophical. The way we do things here, the idea of a student-athlete, are things I really believe in. Everything I believe about teaching physical education as part of the big picture of a student's development fits into the mission of the institute. have played a sport in high school but might want to join a team here at Caltech.

TD: I think there's something for everyone depending on what that person's abilities and interests are, and that's something that not every school can say. You can find a different option for your own level of competitiveness. The education and the opportunities here at Caltech are as unique as they are varied.

Tech: Do you have a "vision" for Caltech? That is, can you say, "Caltech is really great with the opportunities and situation it has now, but it could be even better, and in three years...?"

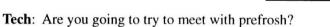
TD: My answer today is different than it will be two months from now, or two months after that. I suppose I do have sort of a philosophy, and that's that we need to value athletics. We need to recognize the accomplishments of our student-athletes, because that takes a lot of dedication and sacrifice. We need to value what Braun Gym and the athletic department here means to the Caltech community, and what our staff does. As far as a "plan," right now I just want to meet with people in the department and students and staff across the campus, and get a sense from people of where we can go. Then we want to push forward in the direction within the stated mission of Caltech.



Tech: The atmosphere here surrounding athletics must be different than at many larger schools, may be different from your own experience — especially in our intercollegiate competitions, we sometimes don't have much success. Is this an issue you dealt with in your decision?

TD: I think there's a difference between success and winning and losing. We should do everything we can to give our coaches and student-athletes a chance to be successful, but this is Division III and so we're not doing this to win national championships. Here, athletics is a complement to the educational process. Also, I really see three components to the athletic department here at Caltech: intercollegiate athletics, physical education, and recreational activities. I think each of these should complement each other. We want to give motivated students an outlet, help them become well-rounded.

Tech: Is there anything you would say to prefrosh who are considering Caltech? Some people might be looking to use intercollegiate athletics as a competitive outlet, while others might never



TD: From 9 until 2 there will be a special program for parents of prefreshmen in the Beckman Institute Auditorium. There will be tables there, and I'll be manning one of them. Then from 1 until 3pm the Athletic Department is having an open house here at Braun Gym. I'd like to talk to prospective students and current students as well. I really liked the open reception last friday.

Tech: Yeah, the fruit smoothies were good! TD: Actually, I didn't get any!

Athletics Director Tim Downes schmoozes with the crowd at the open reception in Braun Gym last Friday.

Sports

Baseball places game and sportsmanship above the win

Glance back through the baseball season reveals spirit of camaraderie and jolliness unmatched

BY DAVE BERNAT

Almost every child has picked up a baseball glove and bat sometime during their childhood life. Maybe they couldn't hit the ball, or maybe they "threw like a girl," but they played and enjoyed the game. CalTech students are no different. We do it because it is fun, relaxing, and a great break from the stress of the school year.

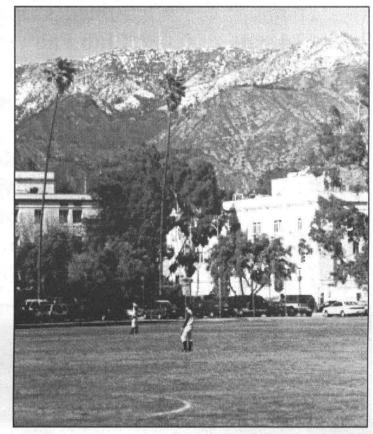
The pre-season starts in early January, and a few weeks later, we play our first game. Iraditionally, this game is against the L.A. Dodgers Fanasy Camp team: Dodgertown. Ihis doubleheader is always a bt of fun and a great way to ease showing improvement over the last few years. This year, the Beavers have been powered by outfielder Derrick Hasterok (So), team captain and Outfielder Grant Williams (Sr), and team captain and Shortstop Greg Fricke, who has a slugging percentage of .631.

Nonetheless, it is a team effort, and the team wouldn't function without Third Baseman Tim Buschman (So) covering the doubles down the line and Outfielders Matt Sullivan (Jr) and Dax Herrera (Fr) running down the long fly balls, far over their heads. Integral to the infield are secondbasemen Dave Hiller (Jr) and Miles Shuman (Sr) along with firstbaseman Brian Stalder velop completely new ones.

So this Saturday, when all you Prefrosh are sitting around wondering what to do, come be an Athletic Supporter and watch the Beavers take on La Verne in an attempt to put our losing streak behind us. The doubleheader starts at 11am with a break for lunch between games.

Baseball at CalTech is a great opportunity that you don't want to miss out on. If you don't want to be an athlete, at least join the rest of the school in the bleachers as we take on our SCIAC opponents.

Whether you want to play the American Pastime, hear a few of the Coach's stories, or just experience the 72 degrees "So this Saturday, when all you Prefrosh are sitting around wondering what to do, come be an Athletic Supporter and watch the Beavers take on La Verne in an attempt to put our losing streak behind us."



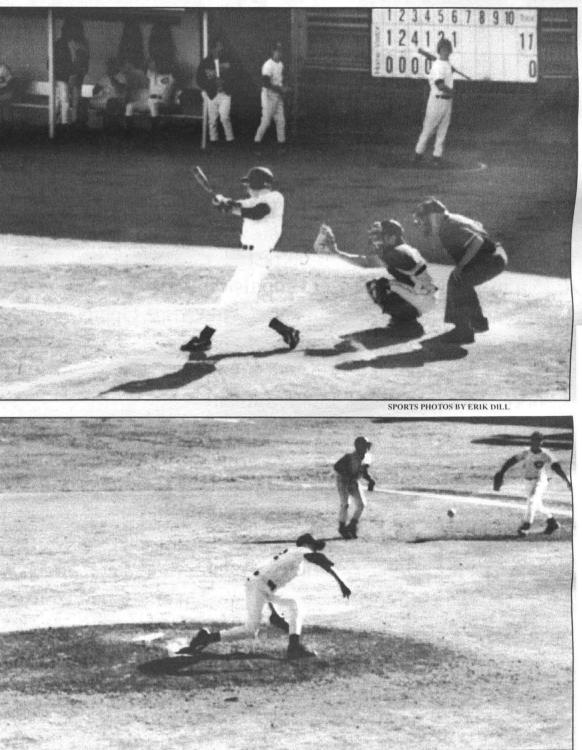
"Maybe they couldn't hit the ball, or maybe they "threw like a girl," but they played and enjoyed the game. We do it because it is fun, relaxing, and a great break from the stress of the school year."

nto the spring season. Throughut the year 30 games are layed, 21 of them being against ther conference teams. Usually here is a game Friday afternoon, ollowed by a doubleheader on Saturday. "It's really fun to ravel around to nearby schools nd to see their fields, especially when some of our fans follow to away games, but what I eally get a kick out of is checkg out the other team's girliends," remarked senior first Dawson. Matt aseman alTech Baseball is a wonderal opportunity to get far away om campus and to play a sport.

The CalTech Baseball team not known for its ability to rush the opposition; conseuently it can be played for by most any student. All that is eeded is a love of the game, and wo hours, four times a week for ractice. Practices are from 4-6 very weekday, usually with Monday or Friday off. The pracices and games are coached by Coach John D'Auria and asisted by graduate student Frank Monzon. Coach D'Auria has een with the team since 1989, fter spending time as a pitcher or the Detroit Tiger's minor eague staff. Unfortunately for both, they ere not members of the CalTech team that won our last onference game. Sadly, the ruth is that the CalTech Beavers ave not won a SCIAC confernce baseball game since someme in late 1987. Yet every eekend we go out there ready break our 255 game losing reak.

(So) and Matt Dawson (Sr) to help turn the numerous double plays.

And of course, who can forget the number 1 and 2 positions of pitcher and catcher? Primary catcher Jeremiah Smith (Jr) has racked up over 122 innings behind the plate with only one error to his name, and he is always sacrificing his body to keep the ball from going wild. Pitching to Smith are veteran starters Alan Rosenwinkel (Jr) and Kevin Bradley (SS...Sr), along with newcomer Bill Therien (Fr). This trio has pitched 177 innings with almost 100 strikeouts combined. All three are dependable and can always be counted on to be consistent even when the situation calls for 150 pitches in 7 innings. Our Bullpen is filled with Eric Tardiff (So) and various other of beautiful Southern California weather in the middle of February, CalTech Baseball is an excellent option.



The Beavers have been

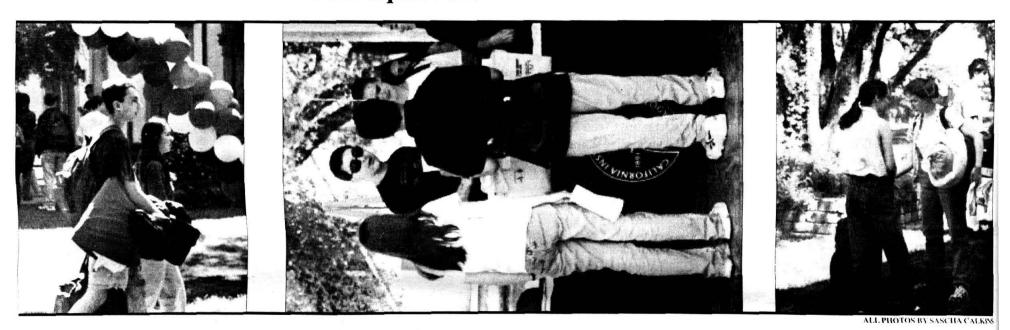
starters on the team.

Future prospects are freshman outfielders David Bernat, Chris Rutherglen, Brian Palmer, and Aaron Simons, each who have shown improvement throughtout the year and have consistently put the ball in play during the game. Fortunately for these freshman the team is very flexible with regard to the positions players play. Many of the team's starters also play secondary positions when needed. And this truly is one of the great things about playing for the CalTech Baseball team. Very often there are opportunities for student to play that he а wouldn't have had at another school. Beaver Baseball is a great way to experiment and test your baseball talents, or to deApril 16, 1999

6

Prefrosh

6 a.m. — 10 p.m.	Athletic Facilities Open	Brown &Braun Gyms
8 — 9 a.m.	Breakfast with Professors	Chandler Dining Hall
9 — 10 a.m.	General Session:	Baxter Lecture Hall
	Academics at Caltech	
10 a.m. — 5 p.m.	Attend Classes	
-	Meet with Faculty	
	Campus Lab Tours	
11:30 a.m. —1 p.m.	Lunch	Student Houses
1 — 2 p.m.	Option Sessions - learn what you are!	
1 — 3 p.m.	Athletics Open House	Braun Athletic Center, 2nd Floor
2:30 — 4 p.m.	Club Fair	Olive Walk
4 — 7 p.m.	International Day	Olive Walk
5:30 - 6:15	Dinner in the Hovses	Fun Fun Fun!
7 — 9 p.m.	Performing Arts at Caltech	Dabney Hall (not Hovse)
7 p.m.	Marvelous Magic Show	Page House Dining Room
7:30 and 10 p.m.	ASCIT Movie, Contact	Baxter Lecture Hall
9 p.m.	Casino Night	Fleming House Lounge
9 p.m.	Huge Screen Video Games,	Ricketts Hovse Courtyard
	Four Square and Fire	



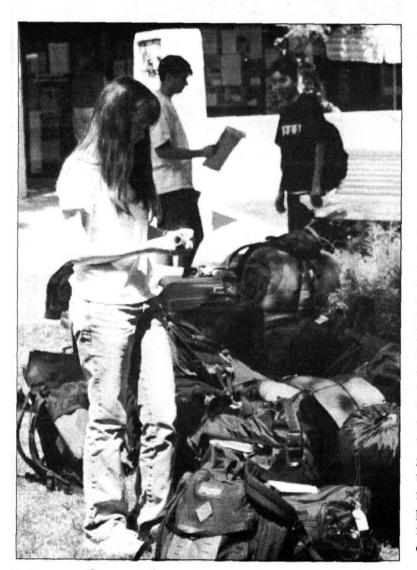
Experience the sublime perfection of Saturday activities

8:30 — 9:30 a.m. 7:45 a.m. — 12 noon 9 a.m. — 2 p.m. 10 a.m — 12 noon 11 a.m. — 4 p.m. 12 noon — 1 p.m. 12 noon — sundown 1 — 2 p.m. 1 — 2 p.m. 2 — 3 p.m. 2 p.m. 3 — 4 p.m. 3 — 5 p.m. 5:30 — 7 p.m. 8 p.m. 9 p.m. 11 p.m 12 midnight

Breakfast Jet Propulsion Lab Tour Financial Aid Office Opens **Campus Lab Tours Bookstore Open Picnic Lunch Tie-Dye and Graffiti Extravaganza** "After Caltech: Work? Grad School?" Premed Program at Caltech Research at Caltech **Slam Dunk Contest** Women in Science and at Caltech Diversity at Caltech - Open House **All-Campus BBQ Ruddock Greens Miniature Golf Campus-Wide Capture the Flag Post Capture the Flag Barbeque Blacker Hovse Midnight Ultimate**

Avery Café Corner of San Pasqual and Holliston Financial Aid Office

Winnett Center Court of Man (south of Beckman Aud.) Dabney Hovse Courtyard 106 Eudora Spalding 147 Noyes Beckman Institue Auditorium Page House Courtyard Steele House Minority Student Affairs Office Olive Walk Ruddock House Lloyd House Dining Hall Lloyd House Courtyard Court of Man



Prefrosh React to the Caltech Experience

With essays finished, lit room containing the wisdom résumés completed, and finally (cheerfully) acceptance letters received, we assumed we were home free. All that remained was the simple task of choosing a college. Or so we thought.

Luckily, as slacking second semester secondary school se-

niors, we have the time to study our options in the allimportant choosing of a college. So, here we are at Caltech.

The first things we noticed were the sunshine and the palm trees so alien to our native Wisconsin (or at least, to threefourths of us). Certainly, we are en-

of the ages. I was warned not to touch, for true understanding of the lab equipment is not a knowledge to be easily gained, nor are the uninitiated permitted to partake of their power. As we left, I knew that one day, if I persisted, I could re-enter this

"we are enjoying the entertainments after our years of nothing but cow-tipping"

joying the entertainments after lab. Then, no longer a mere no idea exactly why I aimed a

WEEKEND

rooms were comfortably arranged, and the personal sinks were a definite plus. The Beer Room in Page was also featured on the tour, and I was duly impressed by the wall-to-wall beer decor.

Nancy: Well, as a native Californian, I was not impressed by the palm trees or the weather. To put it simply, Caltech was everything I expected, but more so. People were nice, but not just a mere "hi" while coming the opposite way; my randomly-encountered guide gave me an hour-long tour of the campus. People were weird, all the way from studying voodoo art to dancing shirtless. Above all, I was impressed by the honesty of the Techers. Everyone I met admitted how hard it'd be to survive and it really may not be a good idea to be here. I'm still as undecided as I was at the first moment of arrival, but I'm impressed to find this unique jewel in such close proximity to my ordinary world.

Wei: After a long series of annoying cancellations and delays (don't ever fly RenoAir!), I finally reached Page House. An hour spent wandering halls and talking with old friends preceded my first meal in Pasadena. Although I had been prepped in dinner etiquette, I began the meal with hesitation and confusion. Certainly, though, I cannot complain about the rapidity and quality of the service; I never before recognized the power of raising my hand. Seated at the head table between the house

president and the athletic director, I noticed that outrageously large ice cream cones and table-pounding punctuated the extremely "efficient" supper. The meal culminated in throwing bread, baked potatoes, and various other leftover food items at the last speaker - though I still have

A Techer reacts to the Prefrosh

BY CHERYL FOREST

"The Prefrosh are coming! The Prefrosh are coming!"

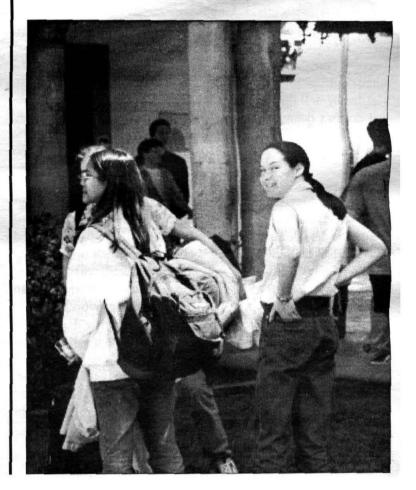
Techers, take heed: an invasion has grabbed a hold of our otherwise calm campus. Caltech scientists have since diagnosed this as the annual infection of Prefroshis Ninetynineia. They are quite a strange breed, noted as much for their ability to comprehend third term AMa 95 homework as for their inability (in certain select cases) to realize that there is more to life than watching the Star Wars trailer and playing X-Wing. Their egos, which on average encompass the nearest 75 cubic meters to their person, are surprisingly well intact and resilient. Amazingly enough, a few have been captured whose egos can barely fit into the typical south house single; these will hopefully be on their way to the Caltech of the East come September for further study. Should one approach you and speak in a calm low voice, be sure to answer whatever they ask; they are considered exceedingly volatile if provoked. Tech considers them more valuable after they have changed into Freshmanis Dorkus, but does recognize that to get the advanced form, the campus must not only endure but triumph over this preliminary infection.

Most of the specimens arrived on campus today, and the effect has been devastating. If the course of the infection is extrapolated from previous years' data, this infection will cause a four-day case of mass lethargy to settle over the usually studious and hard-working campus. Already, poor overworked undergrads, blinded by the infection, have been observed to abandon caution to the wind and their physics sets to the fire place, and instead of preparing for their third term midterms, proceed to "show the prefrosh around." Horrors!

Prefroshis Ninetynineia appear to be superior to previous infections in many respects. The list of their collective accomplishments is astounding, and they seem to posses an aboveaverage amount of social "clue." Of course, these are very preliminary findings, and are subject to revision. They have already started interacting with each other, prompting some Tech undergrads to exclaim: "Dear God! Was I ever THAT much of a geek?" The answer is yes.

In a rash and unwise manner, some Tech undergrads have already started seeking out specific specimens for possible "mating and dating" once the aforementioned specimens arrive back on campus in September as Freshmanis Dorkus. (add something that's not so posturing)

Be certain to report to the Prefrosh Committee (motto: "let's bludgeon our housemates into agreeing to a four-day period of servitude in order to get a lunch at the Ath and the undying gratitude of the Admissions Office") for neural cleansing. The Prefrosh Committee for this year is composed of Cheryl Forest (Blacker), Kim Harle (Ricketts), Liz Kelley (Fleming), Iljie Kim (Dabney), Ellie Park (Lloyd), Erika Swanson (Page), and Andrew Tretten (Ruddock).



our years of nothing but cowtipping.

After waiting for two-plus hours in LAX for a shuttle, we embarked on the hour-long bus trip through the slow-moving LA traffic. The cushy coaches were a portent of the good times to come. From the comfortable seats, we first glimpsed a sign with the words "California Institute of Technology" heralding our arrival.

Jon: Having been given a whirlwind tour of the architectural styles prevalent on campus, I was guided by my host towards the sacred lab. We donned the holy slippers to prevent contamination of the clean room, stomped our feet on the sticky mat to remove the last vestiges of dirt, and entered into a dimly

prefrosh, but a master of the lab - grand high lord of the machine

- and ruler of the universe.

Denise: Cheryl Forest, the Prefrosh Rep from Blacker, gave me a full tour of all seven houses. I tried to absorb the torrent of stories about each individual alley flowing freely from Cheryl, but was only able to retain a fraction of an impression about each house. The ambiance of each house could largely be

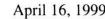
determined by the murals and graffiti gracing every wall, from demons to archangels, Winnie the Pooh to Star Wars, and animé to beer propaganda. I also traveled through hyperspace, beginning in a closet, climbing a ladder, and ending up crawling out of a cabinet in a kitchen (Purgatory, I think). The dorm

dinner roll at his head.

For all of us, these "interesting" experiences foreshadow an exciting weekend - and perhaps four years - here at Caltech. Thanks to everyone who planned and perspired to make our Prefrosh Weekend possible.

The Tech would like to thank the Prefrosh contributing to this article:

Jon Foster: Ellison Bay, Wisconsin Denise Kim: Madison, Wisconsin Nancy Li: Diamond Bar, California Wei Ho: New Berlin, Wisconsin





Present: BoD (minus Jeremiah and Danny), Brian Eastin, Sang-Ah Lee, Ryan Joung, and Angela Shum

Meeting called to order at 19:04.

Dealing with Guests

Brian requests money for a Caribbean band at for an International Week event (through the Caltech Y).

Sang-Ah and Ryan request funding for Korean Student Association (KSA).

Angela requests money for Mudeo (sophomore/freshman event planned by the junior class officers) on Saturday, April 24.

General

Baldeep proposes a change in meeting format so that projects are discussed and reported upon instead of having general business and officer reports. Basically, it is way to limit the number of opportunities for the secretary to insert random comments of interest. So Baldeep says; so shall it be.

Project Reports

Winnett - Caltech Dining Services usually handles the reservations of the second floor of Winnett for various events. Jeremiah "volunteers" to look

into the process of reservation and why the ballroom dance club is dissatisfied with the procedure. Baldeep will forward some relevant e-mails to him.

ASCIT movies - Baldeep talked to Tim Crosby, the ASCIT movies chair about the possibility of switching to showing ASCIT movies every other week instead of every week. He seemed reluctant to do so since the movies have already been reserved for this term. Baldeep will look into whether financial commitments have already made for these movies. Baldeep and Alan will also look into the legality of building an ASCIT video library.

Summer Archive Project -The BoD votes to approve \$4000 for someone to look into and organize the archives, as well as write up a report on the history of student government at Caltech.

Faculty Board Meeting Report - The Faculty Board met this afternoon. Alice Huang gave a report on the status of women at Caltech including faculty, administration, grad students and undergrads. The science communications requirement was also discussed. The current options being discussed for fulfilling this requirement are through a specific course within each option, submission of a paper to an electronic journal, and the publishing of a report to an actual journal.

Big T - Jaideep claims significant progress with this project this week.

Student Advisory System - Melvin and Jaideep claim major progress with this project in the coming week as well.

Prefrosh Party - The ESC seem to have all bases covered for this ASCIT party.

Prefrosh Weekend Donuts - Garrett will okay this large order of ASCIT donuts with admissions and the Prefrosh Committee.

ASCIT Formal - Ritz Carlton Marina Del Rey and the Ritz Carlton Huntington are the hotels still in consideration.

ASCIT Budget - Derek published the results from the ASCIT budget on the web and contacted the club representatives.

Housing Cards - Jaideep will publish an article for the Tech on the details of the roompicks with respect to the housing cards. Kim West says that the housing cards are in the final review stage and will be coming out soon.

Faculty-Student Committees - These will probably be appointed on the weekend of May 8-9 with sign-ups one week beforehand.

Meeting closes at 19:45.

BoD appoves:

- \$500 for the Caltech Y International Week Caribbean band,
- \$300 for Mudeo,
- \$100 for the KSA.

Meeting adjourned at 19:53.

Respectfully submitted,

Hanna Kim ASCIT Secretary



REGULAR MEETING 4/16 Present = IHC - Katie + AmyDuello(as Ruddock Rep.) + Financial Aid Committee (Ian Swett + Nita Losoponkul(via McIlhaney + Baldeep "ASCIT just doesn't do it for me anymore" Sadhal.

May 24 (maybe)

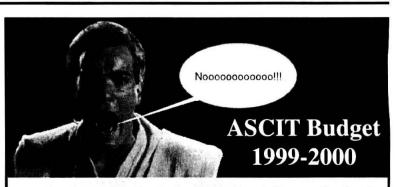
Financial Aid Committee

Ian and Nita give insight to IHC about duties of Financial Aid Committee student members. Look for a summary of all student committee information in the Tech later this month.

Frosh Camp Update

Moving the location of Frosh Camp from the beach to email))+ Lisa Biswal + Jason the mountains has resulted in better accommodations, a working dishwasher, and thoroughly cooked chicken. Therefore the number of upperclassmen who will attend Camp will be reduced. Jobs such as Dean's Helpers, Audio/Visual, Photographer, etc. will be incorporated into the UCCs (president + 4 others from each house). The house presidents will coordinate the Ropes Course rather than have a Frosh group. The UCC selection should be done by the end of this month.

of a complaint. Issues addressed by the committee included identifying people on campus to whom students should report problems and how to deal with false accusations. As a member of the committee, Lisa suggested that the BOC and IHC members receive training to allow students to report problems to fellow undergraduates.



The California Tech

questions regarding the budget? email ascit@cco.caltech.edu.

Publications	Old	New	Δ\$
Tech	5100	5100	0
Totem	800	800	0
UROH	200	200	0
Total	6100	6100	0
Salary	1		
Totem	100	100	0
Payroll Little t	700 500	0 500	-700 0
Bookkeeping	4500	4500	0
Total	5800	5100	-700
Operations			
Coffeehouse	1000	0	-1000
Copier Copies/Election/Other	200 300	200 400	0 +100
Web Project	0	8000	+8000
Movies	9100	5000	-4100
Jamroom	0	500	+500
Movies Library Teaching Awards	0 500	2500 500	+2500 0
"Donuts"	1000	1600	+600
SFC Fund	500	500	0
Athletics	1000	2500	+1500
ARC	200	200	0
BOC Total	2000 15800	1200 23100	-800 +7300
	346		
Special Events Semana Latina	750	750	0
Total	750	750	0
Social Events			
Doughnuts	2000	2000 ·	0
Formal	2567	4000	+1433
Multihouse Interhouse Memorial Fund	4200 1400	4200 1400	0 0
Prefrosh Party	750	400	-350
Rotation Party	725	725	0
Halloween	775	775	0
Installs	200	0	-200
Special Event Fund Spring Party	1183 800	1000 0	-183 -800
Total	13200	14500	+1300
Summary Total	41650	49550	+7900
Requests			11900
	Las	t Th	is Given
AACIT	n/a	10	
AIChE Anime	0 120	15	
APSU	0	80	
ARCA	n/a	100	
Ballroom Dance	300		
Caltech C Caltech Caucasian Club	n/a	600	
Caltech Christian Fellowship	n/a 600	500 450	
Caltech Student Pride Association	n/a	225	
Caltech Y	0	100	0 0
CCSA	600		
CETF CEVC	n/a 200	250 300	
Chem Club	200 90	120	
Chess Club	n/a	300	200
Club Latino	n/a	150	
Ecphonema Entrepreneur Club	150 50	300	
Hawaii	50 30	900 300	
HKSA	120	270	
Jamroom	300	n/a	0
Karate Mars Society	200 n/a	300 750	
Orienteering	n/a 0	200	
Out of Context	n/a	900	
Quiz Bowl	n/a	50	300
SEDS	270	350	
Spectre Student Shop	150 0	200 160	
Subsidy to Student Shop ASCIT Memb		n/a	0 900 700
SWE	200	400	250
TACIT	270	400	pend.
Tang Soo Do Treble Makers	160 150	300	
Vegetarian	150 n/a	200 220	
		250	
Water Polo	n/a		
Total	n/a 3960		35 8465
Water Polo Total Std Dev Correlation	3960 201.		35 8465

Meeting called to order at 12:25pm.

Third Term Meeting Times

Meetings are on Thursdays @ Noon rotating around the houses: Blacker April 1 Dabney April 6 (early because of conflicts) Fleming April 15 Lloyd April 22 Page April 29 Ricketts May 6 Ruddock May 13 Blacker May 20 Dabney May 27 DISCO

Blacker will play Ultimate with Page this Sunday (4/18) at 5pm.

Disco dates for this term: 5, 19, 26, May 3, 10, 17,

Sexual Harassment Committee

The committee has edited the institute's sexual harassment policy to include all types of harassment and has also created a course of action in the event

Lottery Cards

Stay tuned to your mailbox for housing lottery details.

Prefrosh Approval

More house events were okayed by the IHC as well as this week's edition of the BFD. Next week we will meet in Lloyd and talk to the student members of the Academic Policies and Curriculum and Educational Outreach Committees.

Meeting adjourned at 1:02pm.

Respectfully submitted,

Catelyn Gifford **IHC Secretary**



Go (A-)

Rated R: for glaring buttocks, lap dances in places you wouldn't want to show your mum, and an "accurate" picture of how fun it really IS to take XTC.

While standing in the ticket line, I overheard many middleaged movie-goers asking, "What's Go?" Knowing only that its cast featured primarily teenagers and Gen Xers, I wondered whether another potentially teen-exploitive flick could appeal to a wider audience. On the contrary "She's All That" never elicited such speculation. Seemingly, something about "Go" and its youth-of- America perspective lay hidden from the score of teen-angst-sickened mature adults.

But you don't need to be clothed in Bebe and Skechers to understand the desperation to pay the rent, or buy draw-string cargo pants to enjoy a romp and a gamble in Las Vegas. And

given the pervasive influence of free-will during the '60s and '70s, envisioning an ecstasyhigh druggy communicating telepathically with a kitty shouldn't be a stretch. The menage-a-trois, though, might raise a few eyebrows.

By Justin Ho

Welcome to the world of Doug Liman's "Go", a movie which is a virtual green light to plaster some of the darker bastions of our MTV culture on screen, through the eyes of some border- line teenager-adult cases, full of confidence but out of their league. Temporally, "Go" maintains a forward-rewind interplay of one day in the lives of a dozen young, renegade characters, stringing 3 vignettes from their distinct perspectives of a drug deal turned joy ride. The juxtaposition of their begrudging day jobs with their nocturnal techno-injected reveries screams "I do what I have to in order to pay the rent, whatever else I do is no one else's

Features business." But there isn't a

purely hedonistic violation of self. What the camera shows is eye-work, that amazing lens into SHREWD minds of Gen X which contrive ways of getting into trouble, likewise undoing mistakes. While druggy-type people have been stereotyped as dim bulbs(and most certainly are), and in doing so has become the theme of anti-drug campaigns, "Go" shows us, at least, that you can not only make a fortune selling fake XTC, but be one smart cookie. Following in the footsteps of Pulp Fiction, then, drug pushers are ... well, kind of cool.

The frustration of career boredom and over-qualification are universal, so evinces Ronna (Sarah Polley, "The Sweet Hereafter") who wickedly rolls her eyes and bags bleach with food behind the counter of a grocery store register. Those glaring pupils and bitchy demeanor nevertheless garner a pseudo-sympathy. She becomes her tempestuous self after a 14-hour shift, struggling to pay the rent, and chances are, she still won't make it. And on Christmas Eve, being a vagrant would most assuredly be an anti-cruise. But introduce a proposition, in the shape of a Brit who wouldn't mind paying

\$20 for a blow job. No, Ronna's not a cheap slut, but after a long shift already, she takes another one. This minor swap gives Simon a much needed fling in Las Vegas with a mlange of gangsta posers who are absolutely hilarious on and off the road, but Simon's persona non grata behind the checkout counter leaves a pair of soap opera stars bereft of their latest instalment of XTC. Simon himself is not the big drug dealer, just a wash-out lower rung in a very sophisticated hierarchy of substance pushers. With little previous experience, presumably, replacement Ronna pushes a faux pas by traversing the intermediate guy and appearing on the doorstep of a scary raver punk big pin, for the sake of pushing profit with the leatherclad pair(Scott Wolf, Jay Mohr). But strapped for cash, she trades her word of a \$90 expectation for a few hours of Clair(Katie Holmes), playing the role of a collateral and innocently misguided, Ronna groupie.

Even as Ronna confronts her customers later that night, there is a strange air. Cinematically, not everything is hunky dory, especially the bulgy-eyes, balding gentleman in the company of the two soap stars. April 16, 1999

Ronna shrewdly surmises a sting, just one conflict so far, and her only out is "flush." This creates yet another problematic scenario- Clair the collateral is trapped playing Breakfast Club scenes with Raver scary druggyguy, and Ronna has neither dough nor high. Intelligence, part one: Ronna escapes the trap; part two: Ronna rescues Claire; part three: what to do with hallucinating Manny? Nothing. Smart: his ecstasy highs become a nice set up for the re-introduction of the Macarena and the miseducation of how not to dance with a banana.

Ronna is the antithesis of almost all teeny bopper movie heroines out there nowadays. Chicly dressed, though not poster-childing Gucci, she also provides the persuasive and tough image of confidence, not the "as-if" Clueless facade of respective blondes and brunettes in other flicks. She is aware of the desires of airheads of her generation, manifesting most provocatively in the must- impress act of downing cold medicine, in the likeness of XTC. Idiots' pretentiousness turn into Ronna's mini-fortune.

As the check-out counter trio assembles at the techno gala, PLEASE SEE TICKET STUB ON PAGE 11

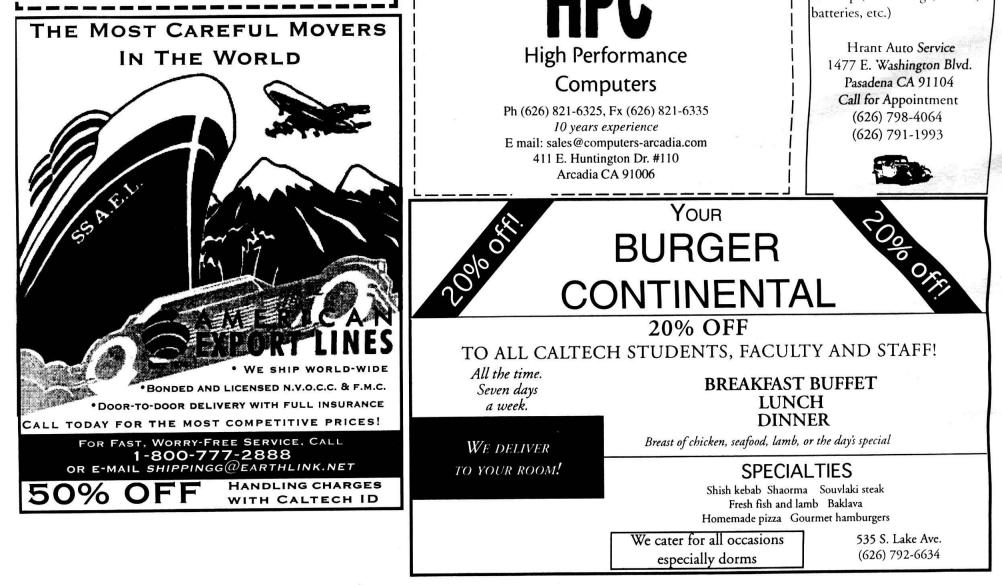
FOR SALE: Used sofa. Plaid w/duct tape trim and freeloading roommate attached. Must Go! Found a sweet single thanks to SpringStreet, the personalized online service that helps you find your perfect place. In this case, a single. www.springstreet.com Log on. Move in. Car problems? Complete foreign and domestic auto repair -- In service for over 29 years. (Engine repairs, tune-ups, old change, brakes,

> Hrant Auto Service Pasadena CA 91104 Call for Appointment (626) 798-4064 (626) 791-1993



Subway \$1.00 off any footlong or \$0.50 off any 6 inch 15% off from any party subs (Will deliver for meetings and parties) with Student I.D.

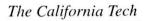
Only good at 2377 E. Colorado Blvd. Pasadena (at the corner of Sierra Madre and Colorado) 626-796-3002



AUTHORIZEP PEALER IBM · TOSHIBA · HP and many more Call in / Fax / E Mail for information / quotes on

Notebooks, Systems pricing, printers, accessories, upgrades, repairs, & networks.

We will reply back the same day!



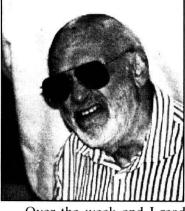
COMICS

$\mathbf{DILBERT}^{\mathbb{R}}$ by Scott Adams

April 16, 1999

FoxTrot by Bill Amend





Over the week end I read about a book, "The Pity of War", written by an English don, actually a Scott, Niall Ferguson. The book turns our common understanding of the history of this century, "on its head". I have only read the review, not the book itself, so I should probably wait before commenting, but then such qualms have not stopped others before me. I may not get to read the book for a while and I have a column to write, so here I go now, rather than later.

The way Ferguson approaches history is somewhat controversial. He does not just report and analyze what has happened, but he challenges previous interpretations, in contrarian fashion. As the review quotes a critic to say, this is a historian who acts as an advocate or a jury, not as a judge. He seems to have a quasi-experimental approach to history, doing "what

Dean's Corner

Elephants and Butterflies

by Jean-Paul Revel

if' exercises in which he explores a multiplicity of outcomes...

The book argues that the First World War had very different origins from what is generally held. The war was not so much a consequence of German militarism, as it was a miscalculation by Prime Minister Grey of Great Britain. There would not have been a "worldwide" conflict if instead of jumping into the fray, and coming to the rescue of neutral Belgium, Britain instead had remained neutral. And Britain jumped in, not out of high-minded concern for the freedom of a neutral country, but because it seemed to be the expedient way to maintain a fragile government. It is suggested that Bismarck would have been content with minor gains, perhaps a German led European Federation. Maybe the incredible losses of men (20,000 a day!) in the great battles and the trenches would not have occurred. Germany would have

remained economically stable, so that

Hitler, instead of coming to power by promising a renewal of the devastated German economy, would have continued his life as a mediocre painter (I thought he was a house painter, but the review says he painted post cards). There would not have been a Second World War, etc, etc. You can see that but for PM Grey's "error", it would be a very different world from the one we live in.

So far as I can judge from the review, the book falls short by not analyzing the psychological make up of PM Grey. From what I can tell, there were all kinds of complications having to do with secret negotiations with. the French, of which Grey was not aware... Yet, in the spirit of "what-if history", I suppose we could argue that it is Grey's psychological make up that was at the root of the problem, and postulate that he was brought up by a cold and distant mother and a loving but simple nanny. The contrast in their reactions to daily life led him to always see many different sides in any

event. He learned to try to please everyone. While this can be useful to a politician, it ended up making for an indecisive PM. As you can tell this tale is akin to the story of the Siberian butterfly causing a tornado in Texas.

Ferguson's brand of history also made me think of the relativity of Truth, an oxymoron perhaps, yet one worth considering. What is truth but the plain unvarnished accounting of facts? If that is so, why does one speak of the absolute truth? Is there any other truth? Can there be a whole set of truths, each a logical conclusion from a particular set of facts? The story of the elephant is an old version of this: the truth about the nature of the elephant depends on what part of the beast each blind man is touching. The whole, absolute truth about the elephant can be reached, but only if the appropriate procedures are used. Either the blind get together and talk and share their experiences, so all become convinced of the truth of the other person's description of an elephant. Or they believe the truth as appreciated by a sighted person. The partial truths arrived at by the blind explorers are just that, incomplete versions (of course, the sighted may not realize that the elephant is warm to the touch, so they do not know the whole

truth either).

In the Dean's office I often encounter the elephant problem. I hear accounts of the same event by different people. It is sometimes hard to believe that it is in fact the same event that's being described. Obviously each person is telling a partial truth, due to the different points of view that the observers come from. The less charitable explanation of course, is that the differing statements of fact are actually statements that distort the facts to make the person(s) involved appear in the best possible light. Hopefully any distortion of the facts is done unconsciously. However unpleasant it is, we must tell the Truth, take the responsibility for our actions. Our motto proclaims that "the Truth Shall Make You Free". Only the Truth can remove the fear of being discovered, and give one peace of mind. Only the Truth can make others trust and believe us. So when you describe your latest elephant be sure you mention all the parts, present the whole truth, lest the butterfly shake the world.

A bientot!

Jean Paul Revel

Jean-Paul Revel

THE CURE FOR THE

COMMON SOCIAL LIFE The Pasadena Jaycees invite you to learn more about our fun community group. Come to our free <u>Social Mixer</u> April 21, 1999 at 6:00 pm <u>Boomerock</u> in Old Pasadena

For more information call: 626-795-5146

GAY COUPLE SEEK EGG DONOR. Prefer: bright techie, grad or undergrad, engineering, math or science student, Caucasian, slight to medium build. Compensation: \$15,000 plus our undying gratitude. Please contact our rep's: family@GrowingGenerations.com there is yet another sign of the film's versatility: the ability to depict a club scene that is realistic, not too disturbing, and not inflated with cheesy dialogue in between. Quite naturally, Ronna's artifice to deceive her XTC provider turns awry, and something bad happens. What happens after that? Anticipation! The story rewinds 12 hours or so, and takes anther path through the eyes of another character implicated in the movie schpleal. Simon's escapade with friends on a road trip begins interesting enough, brimming with witty dialog, identity crises, the need-to-impress-gone-wrong fiasco, and a very comical rendi-

1999-2000 UPPER CLASS MERIT AWARDS

Each year, the Faculty Committe on Scholarships and Financial Aid grants a number of Upper Class Merit Awards to the most academically talented of the Institute's Sophomores, Juniors, and occasionally, Freshmen. Upper Class Merit Awards are based on outstanding scholastic achievement as demonstrated by exceptional performance in formal classes and/or independent reserach and not a financial need. Last year, the Committee recommended a total of 53 Upper Class Merit Awards. Awards ranged from \$6,250 to full tuition, \$18,950. The number and caliber of the applicants determine the level of awards in any year.

tion of how whiter-than-vanillaice turns into Rhythm Nation. However uneducated the skinny chest baring, tank-top wearing wannabes are though, there's an almost lyrical presentation of street talk prose.

But dialogue aside, the "Go" factor kicks in with less baggage and more action. A night shooting craps turns into a very fantastic opportunity for Simon to crash a wedding and smoke some bongs with two of the bridesmaids. Then the curtains catch on fire, and Simon, embarrassed, very stressed, and undressed is an accomplice in some naughty car-stealing, nudey-bar hopping, exoticdancer touching, bouncer-shooting escapade(and that's just halfway through the movie).

Summary: "Go" is a fab experience. Not exactly a genre definer because the temporal confusion, drugs, sex, and techno have been done before, but it's a fast pace film which just screams motion, gyrating, hard driving, head-spinning, or otherwise. The ultimate impetus to stay for the movie: anticipation and unresolved conflicts for those ADD-prone of today's youths, with lovely twists and tangles on the side.

The Ticket Stub +++ Go +++ continued from p. 9

PART-TIME EMPLOYMENT

flexible hours for student clerical assistance in Pasadena law office \$8/ hour (626) 564-9900

Academic couple seeks: EGG DONOR 20-28

Right candidate compensated apprx. \$10,000. Brunette hair, hazel/brown eyes, about 5'8" tall, even-featured, strong SATs, lean/athletic build, in excellent health. Pls describe backgrounds, education, and motivation, along w/ several [returnable] photos to: POB 425545, Cambridge, MA 02142. All serious replies answered.

Applications are available in the Financial Aid Office at 515 S. Wilson. THE DEADLINE FOR SUBMITTING COMPLETED APPLICATIONS TO THE FINANCIAL AID OFFICE IS 5:00 PM ON APRIL 23, 1999.

Attention all undergraduate financial aid recipients

The last date to request any change to your 1998-1999 Financial Aid Award is Friday, April 30, 1999. Requests for 1998-99 changes made after April 30 will not be considered. Please contact the Financial Aide Office at ext. 6280 if you have any questions.





you have any questions.

If you have the time we have the need.

Goodwill industries of Southern Cali-

fornia is a non-sectarian, not-for-profit

organization whose mission is to en-

hance the quality of lives of people who

have disabilities and other vocational

disadvantages by helping them to be-

come productive and self-sufficient

through education, training, and job op-

portunities. Goodwill helps more than

2000 people each year and is nearly 90

percent self-supporting through its 24

retail stores, education, and job-train-

ing programs, computer recycling center and its Industrial Services contracts

with local businesses. For more infor-

mation on how you can help Goodwill

help others through volunteering, call

Robin Braislin at 323-223-1211 ext.

Are you bright, motivated, fun, and en-

ergetic? Do you want to make a differ-

ence on campus? Join the undergradu-

ate Women's Leadership Group!

This group is dedicated to promoting

campus-wide, inter-house, leadership

for undergraduate women. The group

is forming now, and a planning meet-

ing will be scheduled for early Spring

Term. If you are interested in joining,

contact Janna Horowitz in the Counsel-

janna@cco.caltech.edu, before the end

Free anonymous HIV testing is avail-

able every Monday evening using

Orasure oral testing at the AIDS Ser-

vice Center, 1030 S Arroyo Parkway.

Appointments by calling 888-448-9242

are preferred; walk-ins are welcome.

Last appointment at 8:00 pm. For more

information call Craig Petinak at 626-

Center,

x8331

or

230.

ing

of winter term.

441-8495.

Announcements

**The Caltech Ballroom Dance Club is providing free lessons for both beginning Merengue (7:30 to 8:30 pm) and beginning Argentine Tango (9:00 to 10:00 pm) in Winnett Lounge. Both series started on Monday, April 12 and will run for seven consecutive Mondays. Each lesson starts with a review and no partner is needed.

**Go to www.JobMonkey.com for free information on many thousands of summer work opportunities around the world.

Information and applications for **1999 Summer Work-Study are available in the Financial Aid Office. If you are interested in Summer Work-Study, please submit the required application as soon as possible, but no later than June 1, 1999. Your entire financial aid application must be complete by June 1 to be considered. If awarded, workstudy funding will begin July 5, 1999.

**The Caltech Ballroom Dance Club is also providing two series of lessons for a fee (\$35 for one or \$60 for both series, \$28/\$50 for Caltech undergraduates). The classes, Salsa (7:30 to 8:30 pm) and Hustle (9:00 to 10:00 pm) will take place in the Winnett Lounge. Both series started on Thursday, April 15 and will run for seven consecutive Thursdays.

The Caltech Progressive Coalition welcomes students, faculty, and staff across a broad ideological spectrum who are interested in working hard for peace, human rights, and economic justice. For instance, we are active participants in the nationwide campus movement against the sanctions and bombing war in Iraq. For more information, contact Byron Philhour at *byron@cco.caltech.edu*.

Catholic Big Brothers, Inc. needs YOU to lend a child a helping hand in a non-school-hours program where children ages 7 to 14 and volunteer mentors work together to improve reading, writing, and arithmetic skills. Sessions are located at the Northwest Pasadena Mentoring Center, Villa Parke Community Center, 363 East Villa Street. Catholic Big Brothers has been serving volunteers and children of all faiths since 1925. For more information call 800-463-4066.

The University of Southern California Youth Sports Program offers summer employment opportunities for the six-week period from Friday, June 28 to July 30. Mandatory training seesions will take place June 18 and 19 and June 23 and 24. USC is looking for senior counselors, counselors, specialists in athletic disciplines, and counselor aides. For more information, call Parker Jenkins or Justine Gilman at 213-740-5127.

Mints

ages, and transportation will be provided. You'll get a free T-shirt! If you're interested contact Athena Castro at the Caltech Y, *castro@cco.caltech.edu* or x6163.

**The Distinguished Speaker Series of Southern California presents Margaret Thatcher in the Pasadena Civic Auditorium, 300 East Green Street, at 8:00 pm on May 3. In this rare public appearance, she will share her ideas and interpretations of world politics today and the challenges facing us in the 21st century. Tickets may be purchased at the Pasadena Civic Box Office (626-449-7360) or Ticketmaster (213-480-3232). For subscription information 800-508-9301 call or www.speakersla.com.

**The Capitol Steps will perform on Friday and Saturday, April 30 and May 1, at 8:00 pm in Caltech's Beckman Auditorium. The Capitol Steps are a group of current and former Congressional staffers who first began performing their musical satire as entertainment for a Capitol Hill office party. Tickets to this performance are priced at \$32, \$28, and \$24; youths 12 and under receive \$4 off. Student and senior rush tickets will go on sale for \$10 beginning one-half hour before the performance (subject to availability). Tickets can be purchased at the Caltech Ticket Office, 332 S. Michigan Avenue, or through Ticketmaster (213-480-3232). For more information call 1-888-2CALTECH.

There is a **Survivors of Incest Anonymous (SIA) meeting at 10:30 am, Saturdays at Las Encines Hospital (2900 E Del Mar Blvd.) in the Inservice Room. This is a meeting for survivors of sexual abuse. Remember: You are not alone.

**Join Jorge Mester and the Pasadena Symphony for another All Mozart concert at 8:00 pm on Saturday, April 24 at the Pasadena Civic Center. This concert will include Serenata Notturna, K. 239, Piano Concerto No. 21, K. 467, and Symphony No. 40, K. 550. Tickets can be purchased through Ticketmaster (213-480-3232) or the Pasadena Civic Box Office (626-449-7360). Student tickets are available for \$7.00 with ID, and can be purchased from the Caltech Y for \$6.00.

****Lazer Vaudeville**, a family show that combines the high-tech effects of lasers and black lights with the traditional vaudeville arts of juggling, comedy, and acrobatics, will perform on Saturday, April 24, at 2:00 pm in Caltech's Beckman Auditorium. Tickets are priced at \$10 for adults and \$5 for children. Tickets can be purchased at the Caltech Ticket Office, 332 S. Michigan Avenue, or through Ticketmaster (213-480-3232). For more information call 1-888-2CALTECH. tion Instructions link from http:// www.cco.caltech.edu/~seds/ telescope.html. For other information contact Loren Hoffman at loren@cco .caltech.edu or Leon Torres at leon@ugcs.caltech.edu.

A Fluid Mechanics Seminar entitled "The Simulation of Gravitational-Wave Sources for LIGO" will be given by Kip Thorne, Richard P. Feynman Professor of Theoretical Physics at Caltech at 3:00 pm on Friday, April 16 im room 306 Firestone. Refreshments will be served.

The second lecture in the Chemistry 0.1 Seminar Series will be held on Friday, April 16, at 4:00 pm in Baxter Lecture Hall. John Richards, Professor of Organic Chemistry at Caltech, will discuss "Chemistry, Catalysis and Life." This is the fourth in the 0.1 seminar series designed to introduce innovative research to a crosssection of the campus community. All lectures will be directed at a nonspecialist scientific audience, and no prior knowledge of chemistry will be necessary to understand them. A list of all Chem 0.1 seminars is available online at http:// www.cco.caltech.edu/~koonin/ CCE0_1seminars.html.

The Viklarbo Chamber Ensemble will perform in Dabney Lounge at 3:30 pm on Sunday, April 18. Admission is free. For more information call 1-888-2CALTECH or 626-395-4652.

The annual **FOCAL** (friends of Caltech Libraries) **Booksale** will be held on Friday, April 23 from 8:30 am till 2:30 pm in Dabney Hall Lounge and Gardens. The booksale is open to the public; everyone is welcome. Come and see what treasures there are to be discovered!

Fellowships and Scholarships

**The Ebell of Los Angeles Scholarship Committee offers scholarship awards of \$2,000 to undergraduates attending Los Angeles County institutions. Scholarships are awarded for 3 years or when the student graduates, whichever comes first. Applicants must be a U.S. Citizen, be a Sophomore or above, have a 3.25 or higher GPA, carry a minimum of 36 units per term, live and attend a school in L.A. County, and be a registered voter in L.A. County. To apply, applicants must submit an application form, a personal statement and a Parent Financial Statement. Applications are available in the Financial Aid Office. Entries must be submitted by April 30, 1999.

Upper Class Merit Awards are based on outstanding scholastic achievement as demonstrated by exceptional performance in formal classes and/or independent research and are not based on financial need. Last year, the Committee recommended a total of 53 Upper Class Merit Awards. Awards ranged from \$6,250 to full tuition, \$18,950. The number and caliber of the applicants determine the level of awards in any year. Applications are available in the Financial Aid Office at 515 S. Wilson. The deadline for submitting completed applications to the FInancial Aid Office is 5:00 pm on April 23, 1999.

The John Gyles Education Fund is offering scholarship awards up to \$3,000 for the 1999-2000 academic year. Applicants must be Canadian or U.S. Citizens, have a 2.7 or higher GPA, and demonstrate financial need. Criteria other than strictly academic ability and financial need are considered in the selection process. To obtain an application, send a self-addressed, stamped envelope to: The John Gyles Education Fund, Attention: The Secretary, P.O. Box 4808, 712 Riverside Drive, Frederiction, New Brunswick, Canada E3B 5G4. Filing dates for mailing documents in 1999 are April 1, June 1, and November 15.

Green Hills Software annually awards merit-based scholarships and fellowships to Caltech undergraduates who have demonstrated ability and special aptitude in computer science. The award for the junior year consists of a \$2,500 scholarship. The award for the senior year may consist of either a \$25,000 or \$5,000 scholarship. In addition, one or two applicants are invited to become Green Hills Fellows. Applicants should be second term sophomores with a GPA of 3.2 or higher. The selection criteria include programming ability, academic performance, and faculty and peer recommendations. To apply, applicants must submit an application form, current academic transcript, and three letters of recommendation, preferably from faculty or employers familiar with the student's work. Applications are available in the Financial Aid Office. Entries must be submitted to the Financial Aid Office by April 16, 1999.

For information on the listed fellowships, assistance with essays, for clarification of questions, contact:

FAR - The Fellowships Advising and Resources Office. To make an appointment, call x2150.

For more information, please email lauren_stopler@starbase1.caltech.edu.

UFA - The Undergraduate Financial Aid Office. For information, call x6280, or stop by 515 S. Wilson for an appointment.

Events

**Come watch "The Life and Times of Albert Einstein," a glimpse into the life of Albert Einstein as seen through the eyes of his secretary/watchdog, Ellen, on Sundays at 7:00 pm in the Fremont Centre Theater, 1000 Fremont Avenue. Tickets are \$15, or \$10 with student ID. For more information call 888-441-5979 or 626-441-5977.

**The Pasadena Center, 300 East Green Street, will host the Grand Slam Salute to Star Trek on April 23-25 from 12:00 to 7:00 pm. This amazing Star Trek convention, featuring over 50 celebrities and spectacular special attractions, will unite fans from around the world. General admission tickets are available in advance through Center Box Office, Ticketmaster (213-480-3232), or Creation Entertainment at 818-409-0960 or www.creationent.com. Advance ticket prices are \$21 for Friday and \$31 for Saturday and Sunday; at the door they go for \$26 and \$36. Preferred seating is available. Call 626-793-2122 for more information.

Guitar classes will be offered by Darryl Denning third term beginning Tuesday, April 6. Classes will be held every Tuesday in Student Activites Center Room 1 from 4:30 to 5:30 for beginners, 3:00 to 4:00 for intermediates, and 5:30 to 6:30 pm for advanced guitar students. In-class instruction is free to Caltech students and staff if space permits. Private instruction is also available. For more information call 465-0881 or email ddenning@caltech.edu.

The last date to request any change to your 1998-99 Financial Aid Award is Friday, April 30, 1999. Requests for 1998-99 changes made after April 30 will not be considered. Please contact the Financial Aid Office at ext. 6280 if **Join Caltech SEDS for the Lyrid meteor shower and a star party at Joshua Tree on Wednesday, April 21. The group will leave around 3:30 pm and begin with a sunset hike in the beautiful national park. If enough are interested, those who prefer a longer hike will leave separately right after lunch. The night program includes watching the meteors and observing through SEDS' 8" scope. Email seds@cco.caltech.edu if you are interested.

Have Christmas in April! Come help repair houses for federal work study money (\$12/hr) on Saturday, April 24 and Saturday, May 1 from 8:00 am till 4:30 pm. Dress comfortably in "work" attire. Breakfast, lunch, bever**Caltech SEDS** will be holding its eighth **telescope contruction meeting** on Sunday, April 18, at 2:00 pm in the SEDS lab (0011 Thomas). No prior experience is necessary. For detailed contruction plans follow the Construc-

THE CALIFORNIA TECH Caltech 40-58 Pasadena, CA 91125

Each year, the Faculty Committee on Scholarships and Financial Aid grants a number of **Upper Class Merit Awards** to the most academically talented of the Institute's Sophomores, Juniors, and occasionally, Freshmen. To submit an event for the Mints, contact mints@tech.caltech.edu or Mail Code 040-058 by noon on the Monday prior to its inclusion. Submissions must be brief and concise. Please do not send Mints in difficult formats like Binhex or Word document. ASCII and rtf are best. The editors reserve the right to edit and abridge all material. Solicitations will be referred to the business manager.