## Earth Day!

Today! Winnett Quad from 11:30-1:30!



## 4 ELEMENTS

A Party for Pre-Frosh & Techers: Friday @ 9 PM in the SAC courtyard--next to the Coffeehouse

# The California Tech

Volume CIII, Number 23

PASADENA, CALIFORNIA

April 20, 2001

### New method for looking at Earth

BY RUMI CHUNARA

Caltech scientists have once again taken research about the Earth to new heights. This time, where else but the moon?

Researchers from Caltech and the New Jersey Institute of Technology have revived and revamped an old technique used to study and observe the Earth's climate including variations in cloud cover and atmospheric contents. This investigation involves observing a phenomenon called "earthshine" (not to be confused with its counterpart satellite's beverage) which is the ghostly glow from the dark side of the moon.

This glow is due to the moon acting like a mirror, showing the sunlight that is reflected off of Earth. Earthshine was first described by Leonardo da Vinci, and is visible to the naked eye especially during the crescent moon phase.

Because earthshine is simply light reflected by the earth called its albedo), the earthshine's intensity measures the reflectance of Earth, and this in turn is a good measure of the planet's climate.

"Earth's climate is driven by the net sunlight that it absorbs," says Philip R. Goode, leader of the New Jersey Institute of Technology team, director of the Big Bear Solar Observatory, and a Distinguished Professor of Physics at NJIT. In the most retent issue of the scientific journal Geophysical Research Leters, the team of NJIT and CIT scientists reported earthshine observations showing that the Earth's albedo is currently 0.297, plus or minus 0.005.

Goode added that they "have found a hint of a 2.5-percent decrease in Earth's albedo over the past five years." While a 2.5-percent change in reflectance may not seem like much, if the Earth reflected 1 percent less light, the effect would be significant enough to be a concern when studying global warming. The team made albedo measurements from 200 nights of observations over a two-year period, and another seventy nights in the period between

### Donuts! Prefrosh and urday, around campus and Dabney is academic details to hosting a Tie-them with the academic

Pre-frosh invasion: their here!



BY IRAM PARVEEN BILAL

As the spring quarter climbs its ten-week hike, we know that it is time for a special weekend, one full of all-time favorite events and the reeling in of prospective Techers - the Caltech pre-frosh weekend!

As in the past, this year the same interesting activities are lined up for the visitors who started pouring in Wednesday.

Since a major part of Caltech life is the seven undergraduate houses, each house hosts at least one activity to allow the prospective students a glimpse of their characters.

On Thursday, Page House sponsored a Frisbee golf game followed by Volleyball and a

live performance by Hipster at 7pm on Friday and the Slam Dunk contest and BBQ at 2pm on Saturday. Also on Friday, Capture the Flag and BBQ from 8-11pm in Lloyd. Fleming has Casino Night at 9pm in the Fleming lounge on Saturday and, along with Ruddock and Lloyd, midnight basketball starting at 10pm on Friday in both gyms. Ruddock Greens will open at 8 Saturday evening in Ruddock House. Blacker's playing Midnight Ultimate Frisbee at 11:45pm on Saturday in the Court of Man. Ricketts has a Foursquare, music, and movie marathon at 7pm on both Friday and Saturday in Ricketts house. From 12-6pm on SatDonuts! Prefrosh and
Techers rush
to grab their
strawberry

u r d a y,
Dabney is
hosting a Tiedye and Graffiti party.
Other enter-

donuts Thurs.

at midnight!

The Tech

Editors sit

back and wait

for their

delivery of

donuts.

Other entertain ment highlights include the Caltech Y Movie night, ASCIT midnight donuts, ASCIT movie night, the international day, the un-

derground party, the entrepreneurial lunch, ASCIT carnival and an all-campus BBQ.

The pre-frosh are also shown

around campus and told about academic details to familiarize them with the academic environment. The hosts try to explain to them exactly what they are getting into if they accept Caltech. Some of these academic tours include classes, faculty meetings and campus lab tours.

Let us hope that this year's pre-frosh weekend is successful in providing the pre-frosh of 2001 with an image of the true spirit of Caltech, so that the process of choosing a college is made easier for them. Best of luck to both the existing Techers and to the pre-frosh in this challenging task!



- PHOTOS BY JON FOSTER

## International Week

Two orissi dancers perform a tribute to the elephantgod outside of the Center for Student Services. Orissi (sometimes called odissi) is a traditional Indian dance form that has been revived since India's independence in 1947.

The dancers performed on Wednesday, as part of the continuing International Week at Caltech. This events featured several free entertainments during the lunch hour and also a foreign film almost every evening, including movies from a large number of countries: Russia, Iran, Taiwan, Britain, Sweden, Italy, and Turkey.

This series of events culminates in the International Fair on Friday, 4 to 7 in Avery's courtyard. For just \$3 you can sample food from over 15 countries and enjoy music and performances from a variety of ethnic groups on campus.

More information about International Week is available at <a href="https://www.isp.caltech.edu/Programs/intlwk2001.html">www.isp.caltech.edu/Programs/intlwk2001.html</a>. Find out more about the International Fair and the two films which will be shown on Saturday night.

- PICTURE AND DESCRIPTION BY JON FOSTER



The Usual	Features
Outside World3 Foxtrot6	Commentary
The Dean's Corner7	19.

PLEASE SEE EARTH ON PAGE 3

### News



Present: BoD. Guests: Some absentees from the Budget meeting seeking to make amends and get some cash—Brian Tiedemann for the Electric Vehicle club; Ram Srinivasan for the CURJ; and Sarah Heilshorn for the Caltech Dance Troupe. Later, Elisa Chiang and Gerald Palmrose from the Y Excomm came for co-sponsoring of another upcoming event. And, Janet, our levely Tech editor dropped by to add a few lines about the Tech.

Meeting called to order 5:12 pm, even though it was technically scheduled for 5:15 pm.

Guests

Because the clubs that appealed during this meeting missed the budget presentations, they were not included in the portion of the budget allocated to clubs. Rather, these clubs received funding from our Slush fund, an extra piggy bank portion of the ASCIT budget dedicated to providing financial resources for things we didn't plan for at the beginning of the fiscal year. That includes funding for clubs with representatives who overslept during the budget meeting and didn't get a chance to present, as was the case with one of our unfortunate victims who appealed to us today.

Brian Tiedemann was the representative for the EVC, which charges dues of \$5 per driver. The club presently has 5-10 people. The club asked for \$600-800 for vehicle repairs and other expenses. Registration of the cars is \$100 each, and Todd jumps in to say that registration for that fugly ASCIT van is \$150. Did I say fugly? I meant reliable and spacious. Then came the portion of the presentation when we all gathered 'round the campfire to listen to Brian's old war stories from old vehicle fires but we cut him off at 5 minutes.

CURJ CURJ CURJ. The retention rate of the premier issue was pretty high, based on the small number of issues placed neatly into the cardboard receptacles in the house lounges for undergrads who were so inclined as to not keep a copy. A different perspective claims that students may have just as easily found a dumpster more accessible. But I digress. There was indeed substantial interest in the CURJ. According to Ram, the web site received approximately 800 hits per week before publishing. Plus, it's one of the few tangible entities that evince our superiority over MIT, which has an undergraduate research journal of its own, but, well, we won't get into that. Ram asked for \$1000 capital so that he can further the advertising effort, on websites for other research journals, etc. The entire staff of the CURJ has worked without a salary and put together a tremendous

Sarah Heilshorn came on behalf of the Dance Troupe, which has managed to get some funding from recreation services. They received money for a dance bar because it was seen as something that could benefit the entire community, but athletic services would not provide for them because they are not competitive. The group requested funding for equipment for a children's class and to pay for professional instructors who would hold seminars.

Upon the departure of the club representatives, two persons from the Y organization introduced the possibility of a co-sponsored event, Huntington Tea. ASCIT has allocated £441 (pounds) for such events with the Y, or £147 per term. Such an amount would subsidize the cost of tea, and crumpets, and scones, and sandwiches. Marvelous. Members of the community will be allowed to attend on a first come-first serve basis, with quotas of 25 undergraduates, 25 graduates, 15 faculty, and 15 alumni and other members of the Caltech community. The entrance free to the Huntington, would, however, be paid by participant. You'd think that in describing something as English as tea, I'd do a better job coming off as English. Oh well, probably means I should catch Bridget Jones' Diary.

Janet popped her head in the room for a bit to drop a few lines about how stressful being editor is (and the status of the Tech in general). I would feel sorry for her, but I have a lot of writing assignments and the movies coming out nowadays are really awful and starting to be irksome, so I'll open up commiseration to the rest of the campus. The editors work really hard, and Janet almost found a large portion of the missing Big T, and I better keep stringing praises together so that she'll want to serve as Big T editor next year.

General Meeting

First item of business is to argue about the amount of money that should be granted to each of the organizations. Part of the surplus from the previous year's budget, and a bit of Ted's social fund will be moved into the slush fund. Ted's excellent hard-balling of the Ritz-Carlton helped us get the formal for cheaper, so approximately \$800 extra can be granted to clubs. Aight. So the EVC will get \$300, the CURJ will get \$600, and the Dance Troupe will dance away with \$150. In addition, the Y will get its \$200 request for Huntington Tea. And all the people in the village were happy to sing and dance.

The topic comes to the Big T and suddenly things aren't so happy again. Martha-Helene and Todd have been inquiring about how much has been received by the publishers, and based on when they talked to the man on the other end, they're getting different stories. But either way, it's still just half-finished so not much difference.

The Motion Picture Licensing Association, the company with the rights to movies, says that each public showing of movies incurs a fee of \$300-500. But, the DVD library itself is permissible, if students choose to watch it in their own rooms. So, technically, the ASCIT screening room is a boo-boo, but each of the house ERs or shared viewing facilities would be illegal too. So, word about the Screening Room is hush-hush.

Random line from Ted concerning the Pre-frosh carnival: prepare to help-out between 12 and 6 on Saturday. That's supposed to pertain to us members of the BoD, but if any of you reading this line feel the urge to Herbal, or to help us out too, we'll be your friends.

Dana brings to the BoD's attention that the athletics department would be interested in helping to pay for the varsity letters and lettermen's jackets. On a related note, the athletics hasn't provided funding to either the Cheerleaders or the Pep Band, both of which attend athletic events regularly. So, it is the intent of the BoD to ask Dr. Baltimore and Dr. Brennen for assistance in setting up a Spirit Fund, dedicated to organized clubs that encourage school spirit. As an extra bonus we will be granting spirit sticks, and all those goodies from "Bring It On."

Finally, we introduce a policy concerning clubs and their tendency to forget to pick up funding. In order to keep track of the clubs, and not in a big brother way but just to make sure that they're doing their part in keeping undergraduates active, we've partitioned their total funding to be spread over three terms. That way, each of the clubs will have to talk to us when they get money and tell us how things are going. To motivate clubs to pick up funding on time, we're instituting funding penalties. Clubs will have until drop day to pick up checks for each term, after which time 50% will be deducted. After one term, each club can still pick up some of the designated amount from the previous amount, but will not receive a check after two terms. We hope this will motivate clubs in a warm, fuzzy

Meeting adjourned at 7:05 p.m. and that's a milestone because it's the first meeting under 2 hours.

Evidently,

Justin

### THE CALIFORNIA TECH

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VOLUME CII, NÜMBER 23 APRIL 20, 2001

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5 p.m. Monday 6 p.m. Tuesday noon Monda

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## Caltech tennis hangs with nation's best at competition

BY GERALD PALMROSE & JASON WONG

Sometimes the best way to improve your tennis game is to combete against the best college teams in the nation and play with nothing to lose. A recent trip to Hawaii by the Caltech Men's Tennis squad was just that - humbling but extremely satisfying.

It started off with a late night flight from sunny Pasadena to even sunnier Honolulu. The whole team was excited about playing tennis. For many, it was their first time on the island, which offered many exciting activities to come. There were a total of four matches, all against extremely good Division II teams.

The first team the Beavers played was Chaminade University, and it proved to be an extremely competitive match. The #3 doubles team of Jae-Woo Choi and Arjun Narayanan pulled out a huge win 8-6, and #2 Jason Wong/Eric Sherer lost in a heartbreaker 9-7. In singles, #2 Vivek Sankaran had three match points against his opponent before losing in a close tiebreaker in the third set. At the same time, after losing the first set 6-3, #4 Gerald

Palmrose pulled off a giganti upset by win ning the last two sets 6-4, 6-2. Fi nally, in the last match of the day, #6 Cho battled his oppo nent for three grueling sets be fore losing 7-5 in the third set.

The Beaver then had a day off to relax and explore the lush island of Oahu



Arjun Narayanan's solid play proved the Beavers can play Division II tennis.

Whether it was surfing, going to the beach, eating tropical foods, or visiting historical Pearl Harbor, each player had his own way of winding

On the third day, the men played back to back matches against Seattle University and BYU Hawaii. Against Seattle, #1 Wong used his powerful serves and returns to go up 4-2 against Ram Hernandez,

> ranked 25th in he Western Region, but lost a close set and match. However, Caltech won two singles matches at #2 #3, as and Sankaran and Sherer demolished their opponents, both in straight sets.

After a quick reenergizing stop at Subway, Beavers

faced their toughest opponent of the year, BYU Hawaii. Not only was this team ranked #2 in the nation, it also featured the #2 and #7 ranked singles players in Division II. The Beavers came to fight, though, and a few played

the best tennis of their lives.

"I wanted to show that I would never give up," said Palmrose, as he lost 6-1, 6-3. "Those four games I got were the best games in my life." Sankaran shared his sentiments he lost to Hung Soon Park, #7 in the nation, 6-2, 6-2. But the man of the day was Narayanan, who at #5 singles lost a close first set and then took the second set to a tiebreaker before finally running out of magic.

The next day, the whole team was pumped up against Hawaii-Hilo, especially Wong, who won in both singles and doubles. Commented Wong, "Everything clicked for Eric and me today. We won pretty easily." In addition, Narayanan was hot off the previous day's match and scorched his opponent 6-1, 6-1.

It was a positive way to end the trip. All the players felt like they had competed well in every match, and being around each other for six days helped the team bond as well. Said Choi enthusiastically, "I can't wait until next year. It's gonna be the bomb."

### **Features**

### REJECTIONS!

BY JIALAN WANG

You lose your bid for ASCIT. Harvard turns you down for grad chool. That cute girl in Alley 5 iles a restraining order. It is reection, and not only does it happen to the best of us, it happens no most of us on a regular basis. Rejection is just one of the many inpleasant aspects of everyday life, but while most of them can be dealt with in some construcive manner, rejection seems to have no remedy. When we think of misfortune in life, we tend to focus on severe, dramatic events

such as death and illness, but I find that everyday calamities affect us much more because they happen all of the time.

hink I'm still traumatized from he time in 9th grade when I asked out every guy I knew and was rejected every time!

As we techers seem to have a collective self-esteem problem exacerbated by the 4 year asskicking that is Caltech), the issue of rejection is of particular relevance to us. As with many of life's ills, the most common reactions seem to be the evils of ignorance, blame and denial. You just say to yourself, "I did't really want that

job, or I didn't really like that guy, and everything's all right, right? Although we all know that ignorance is bliss, that axiom doesn't quite hold if the ignorance is

feigned. It is rather disturbing to me how many personal and social problems arise simply from people's inability to cope with rejection and failure.

The hard part, of course, is that unlike other failures, being rejected by other people is not really something you can work on. It's not like failing a test, which can be constructively remedied by just studying more. When applying for a job or asking

someone out, we put ourselves up for judgment. Who we are is all we know to be and can be, so not much can be more demoralizing than to be told that the entirety of our being is somehow unworthy or undesirable and not much is harder to accept. In addition, rejection is a keen reminder that no matter how close we are with other people, we must live many of life's most crucial moments alone. Just as only the victor can truly experience victory, rejection can only

> stomached by the reject. O

fully be

course all of this is very unpleasant and we would rather not think

about it, but really, it's not as bad as we make it out to be. We are so busy trying to convince ourselves that we are not in fact rejects that we don't even realize that being rejected doesn't have to mean a Nasdaq-esque plunge for self esteem. Even the prettiest, smartest, and nicest people in the world get rejected. So some person or agency has rejected you on reasonable grounds. So what? We can't expect ourselves to be accepted by everyone in every endeavor. The sooner we face our disappointments, the sooner we can overcome them. Denial and excuses only stunt progress towards being satisfied, and maybe even productive, people. Just accept it, swallow a little pride, and move Although on. there's no way to make rejection a happy experience, being honest and facing it seems a much superior alternative to hiding the dejection in a dark place to fester, grow roots, and reemerge later zombie-like and hungry for blood.

Rejection. It's not pretty. It's not furny. It's life. So just suck it up and keep living.

CONTINUED FROM PAGE 1

1994 and 1995 using a 6-inch refractor telescope and precise CCD at the Big Bear Solar Observatory, which is operated by NJIT.

The first quantitative observations of earthshine were made in the early 20th century by the French astronomer André-Louis Danjon. However, the field of study then lay untouched for about 50 years until Caltech team leader and Professor of theoretical physics Steven E. Koonin coauthored a paper in 1991 describing its modern potential. "It's really amazing, if you think about it," Koonin says, "that you can look at this ghostly reflection on the moon and measure what Earth's climate is doing."

### The Outside World

Upper Midwest - The Mississippi River approached record flood levels, reaching 23.4 feet in St. Paul, Minnesota. Ten Iowa counties have been preemptively declared disaster areas.

Middle East - Israeli troops seized parts of the Gaza strip in response to mortar attacks on towns in Israel, but withdrew less than 24 hours later after sharp criticism from Secretary of State Colin Powell.

Jackson, Mississippi - A public referendum to change the state flag, removing the Confederate Battle Flag "Stars and Bars" design from the upper left corner, failed by a twoto-one margin.

Cincinnati, Ohio - The city began to calm after several days of rioting which was sparked by the police shooting of an unarmed black man. Since 1995, Cincinnati police have fatally shot 15 minorities, and no whites.

United Nations - With the support of several developing nations, China successfully blocked an American resolution to discuss Beijing's human rights abuses from the agenda of the U.N. Human Rights Commission.

- compiled by Erik Dill

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### A.S.C.I.T.

# A letter from the A.S.C.I.T. President...

Dear Corporation members (i.e., my ASCIT comrades):

Two and a half months have passed since my election. Over spring break, I happened to be in Caimbridge and met with the undergraduate association presidents at MIT and Harvard, and I returned convinced that Caltech students have much more efficacy than they often realize. For those of you who question ASCIT's commitment to the student body and to improving the social and academic quality of life, let me convince you otherwise.

Two weeks ago the Board of Directors (BoD) went on their annual weekend retreat, planning activities for the year ahead and defining this year's approach to student government. In addition to declaring "This is not a cheerocracy," we have adopted certain mottos: "Make ASCIT a verb" and "ASCIT will give you that warm and fuzzy feeling." Though super cheesy, tvWse mantras attempt to summarize the ASCIT envisioned by the BoD. We want Techers to remember their experience at Caltech with a little less pain. While we cannot throw out the

income

Core, we can work to improve it. We can provide opportunities for students to interact with faculty, support and organize social events, and increase campus identity and unity. It is my hope that after this year, maybe after a month, you will begin to view ASCIT less as an idle Big Brother, but more as an appropriate channel for student concerns. As always our board meetings are open to all (Mondays at 5:15pm in SAC 33.) Also, please try to read the ASCIT minutes. That way you know what we have been working on, and you can contact us with concerns or suggestions.

Following this article, you will find the ASCIT budget for 2001-2002. After a ten hour meeting last Friday, where presentations from thirty-seven clubs were reviewed, we have voted and approved the allocation of ASCIT funds. As you can see, our primary source of income is student dues and much of that goes to funding the various publications that ASCIT offers. A considerable portion of our budget is used to fund student clubs and special events like Semana Latina and Yuri's Night. When determining how to fund clubs, we reviewed the number of students involved and benefiting from the club's presence, the frequency and attendance of club activities, and what proportion of the club budget ASCIT funds would provide. Those clubs that were a little more reasonable in applying for funding, i.e. asking for \$100 and not \$15,000 tended to get what they requested. Some of the numbers may look funny. Since funding is distributed per term (to make sure clubs are alive and active), each allotment is divisible by three. Each Hovse will also continue to be eligible for the yearly \$200 for interhovse events and termly \$200 for multihovse events.

Another hefty chunk of our budget goes toward ASCIT services through the web. Not only can you check the CLUE (soon to include the departmental course evaluations from the end of each term) and UROH (find out about research opportunities that are up-to-date) online, but you can read your by-laws too. Our new website (donut.caltech.edu), developed by Jon Dama, Rob Christy, and Dylan Simon, also allows you to

reserve the DVD screening room and search for DVDs, learn about campus clubs, find the best deals for books at our bookmart, and know when the events you really care about (like the next Meat club BBQ) are going to occur by checking our events calendar. Soon you'll even be able to vote online. ASCIT also provides numerous social events like the formal in May and carnival tomorrow, and you can plan your "social life" around them by checking the calendar.

Some new things to notice in this year's budget include ARC student-faculty lunches, the prank fund, and an on-campus event fund. For those of you who would like to invite a professor to eat at the Athenaeum (like the one who wrote that fabulous SURF recommendation for you), ASCIT would like to offer you the opportunity, on us. Interested students may apply to the ARC with a short description as to why you'd like to have lunch with a certain prof. It doesn't have to be very elaborate. We want you to feel more comfortable talking to professors. If you'd rather prank a

Club Breakdown

professor's class, we have money for that too. Long ago seem the days of the Rose Bowl score board take-over. In the spirit of mischief, apply for funding. Finally, knowing realistically that ASCIT parties have just been so bad over the years, we've attempted to encourage clubs to throw parties and events open to all undergrads through the on-campus event fund. If you'd like to bring a band on campus, you can try to apply for funding here too.

As you can see, we've been busy ascit-ing. There, it's become a verb. Just talk to Ayeh. While I cannot mention all the other side-projects we're working on here (like world domination, uh, I mean peace), remember that ASCIT and the BoD do more than just donuts. You've elected an enthusiastic and dedicated BoD. We've been elected to spend lots of hours trying to make Caltech better for you, and if you aren't satisfied, just tell us how.

Respectfully yours,

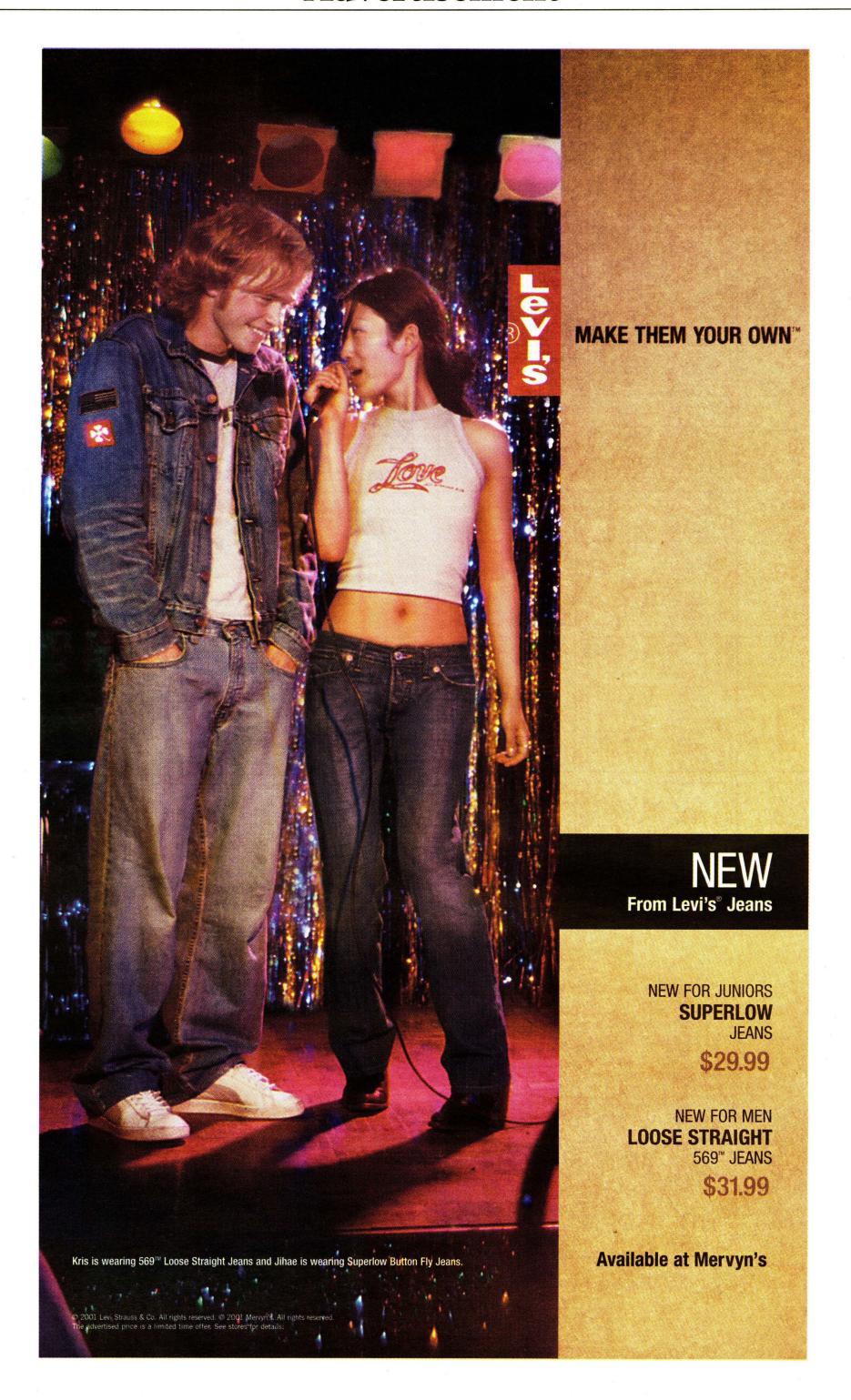
Martha-Helene Stapleton ASCIT President

# \_scibudget2000-2001

Coffeehouse/entertainment

Dues	55560	Coneenousezemenummen	200	CIDD DIEGROOWIT	
ASCITVan	3000	Budget meeting	120	AACIT	402
		ASCITBOD	500	Anime	180
TOTAL INCOME.	58560.	Disco Lights	300	Hillel	201
_		ARC Student-faculty lunches	400	Korean Students Assn	1.50
Expenses .				Out of Context	240
PUBLICATIONS.		SPECIAL PROJECTS.		Caltech Cheerleaders	600
Tech Subscription	51 00	Screening room	300	Gymn astics	180
Totem publishing	800	CURJ	600	SEDS	360
UROH publishing	100			AiChE	75
		SPECIAL EVENTS.		Asian Pacific Students Union	1 02
SALARIES .		Sem ana Latina	900	Society of Women Engineers	240
Totem staff bonus	200	Asian Heritage	300	Caltech Chinese Student Assn	360
CLUE Staff	500	KELROF	300	Quiz Bowl	201
Big Tbonus (00-01)	200	Pranks	500	Pep Band	260
little t bonus	200	Yuri's Night	500	Hawaiian Club	1.50
Big Tstarter (00-01)	300	Social Activism Speakers	180	Juggling Club	102
Coffeehouse bonus	200	# A		Faceplant	120
Jamroom salary	100	SOCIAL EVENTS.		Pre-Med	102
Jamroom bonus	50	Beach Trip	1000	Win dsurf	1 02
Website salary	2500	EO	300	Caltech Student Pride Assn	210
Bookkeeping	4900	Late night donuts	2500	Ultimate Club	210
		Winter event	1000	Treblemakers	102
OPERATIONS.		Formal	4000	Building Bridges	501
Elections	300	Open mic night	200	CCF	501
Ads/Brochures	250	JR BBQ	300	Hong Kong Students Assn	150
ASCIT Movies		Multihouse events fund	4200	Meat Club	300
Events	2000	Interhouse party fund	1 400	Ecphonema	402
DVD library	3000	Carnival	1 000	Shooting Club	102
ARC Teaching awards	700	Rotation event	500	Entrepreneur Club	390
Jamroom	500	On campus events fund	1.500	Graphic Art Forms (GAFAC)	1.50
Weekly Donuts	1800	TBA	800	4 Elements	201
Athletics/Letter subsidies	4 1000			S. P. E. C. T. R. E.	1.50
ARC food	200	CLUBS.		Dance Troupe	1.50
BoC	1700	Quiz Bowl	500	Electric Vehicle Club	300
IHC "	100	Co-sponsared events w/ Calted	th Y 600		
Annualluncheon	200	Total Allocated	8046	TOTAL EXPENDITURES.	5984

## Advertisement



### **Comics**

### DILBERT® by Scott Adams



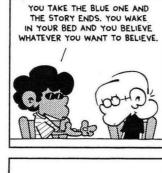


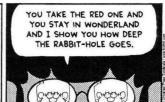






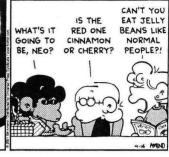


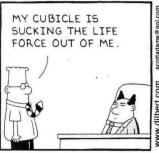


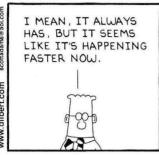


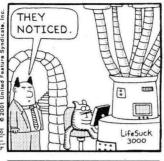
JASON??

FoxTrot by Bill Amend

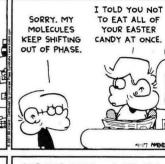




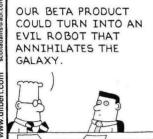












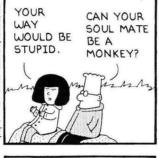


























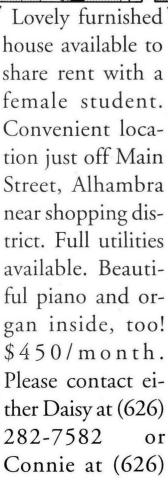




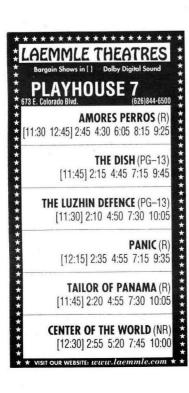








284-3627.







### DEAN

Welcome to campus prospective students! I hope that you are enjoying your stay here and that your questions about Caltech are being answered. It may be difficult to decide on where to go to college but you should have no fear, each of you is capable of doing well anywhere they go.

So the short answer is that there will be no wrong decisions. The longer answer is that your decision will be based partly on imponderables, (may be even the weather, for which we take no responsibility, since Caltech has not had a meteorology department since WW II) and partly on the specifics of what you are looking for in a school. So it may be worthwhile to list some of the great things at Caltech. Whether you find the same opportunities elsewhere, is not mine to say even if I have an opinion. You decide.

So what is so great at Caltech? I think that for many of you it will be to find yourself among peers. I don't mean among others with high SAT scores, that's a given. What I mean is that all of you will come with a burning interest in the sciences. It could be that you are fascinated by the earth sciences, or in the search for planets and life on worlds orbiting other suns. Or may be you are taken by the research on gravitational waves, intent on finding a way to work with LIGO, the Laser Interferometric Gravity Observatory. That may lead you to work with people like Kip Thorne, the Richard P. Feynman Professor of Theoretical Physics. You might have heard of him as one of the two Caltech profs who won a bet they had with Stephen Hawking. Or it might lead you to work in Prof. Libbrecht's laboratory, not on his LIGO project but on the physics of snowflakes which he started with an undergrad, a few years ago. You might be taken by the implications of scientific discoveries on society, or be stimulated by the potential of quantum comput-

Whether it is molecular neurobiology, or working with the scientists annotating the papers of Albert Einstein, all of these things are going on around you. All of these things

## Dean's Corner

Hello Hello

by Jean-Paul Revel

and many more, as well as going for plays and concerts in Pasadena or LA, making your own music, singing, participating in intramural sports and intercollegiate competition. Skiing is an hour away, good skiing 3 hours, the best 8 hours; you can fly, dive, hike in mountains or desert, sometimes hear the sonic boom of the returning shuttle as it lands 90 minutes away from Cam-

Oh yes and no football team. I remember vividly the bus driver taking me to the airport on his last run of the day, trying hard to comprehend what was going on at that Cal..something, what did you call it? A place with no major football presence! We have a great women's basketball team however!..well yes, MIT beat us last January but our side made the first goal, sorry, basket and we'll beat them for sure, next time. In any case we are ready, our cheerleading squad won the Western Open Championship. They have pom poms in the bookstore. Come and see the trophy in the Dean's Office!

The great thing is that all of you who come here can participate in all these adventures and many more. No one here just sits on the bench because she is too short. Anyone who wants to can find opportunities to play, to serve, to work in a lab. There are undergrads even in the President's research lab. That's the true significance of the vaunted ratio. Not that there is 1/3 of a prof/student, but that the good ratio allows each of you with the inclination to establish contact and work with someone in your area of interest, environmental science or number theory.

Now don't make the mistake to think the ratio means that the profs will run after you, oh you precious one! The profs would not be who they are if they were not very busy, directing their research here, discussing their results elsewhere, teaching classes or giving seminars or consulting etc; with all that and more on their plate they may be hard to catch. You have to show interest, you have to capture their attention, and you have to make the moves.

WHAT THE HELL DO YOU THINK YOU'RE DOING?!?

YOU'RE HITTING

Statistics show that well over half of the students do research for either pay or for units. One

measure of how well they do is to look at the newly started CURJ, (Caltech Undergraduate Research Journal) the first issue of which you'll find scattered around campus. One of the things that may keep you away from the lab and research is all the time you'll have to devote to learning basic stuff.

You, like so many before you, will probably imagine that you have already covered many of the topics you encounter, may be in Math or perhaps Biology. The surprise comes when what you thought you knew is dealt with at such

a higher level, that you find yourself spending more hours than you imagine possible, studying and doing homework. But you'll be doing so with others as gifted as you are and interested in science just as you are. You'll be expected to collaborate, and thus teach each other. The work you turn in will still have to be yours, of course.

And you'll be helped because you'll be living with the Honor Code, a fantastic opportunity and an imperious taskmaster. The Honor Code will govern all aspects of your life here, making you free, while teaching you to take responsibility for your actions. Oh yes Caltech is hard. If you are gunning for the top GPA, in the mistaken belief that it is your ticket to med school, may be you'd be better off elsewhere. We have plenty of 4.0s or better, and almost 50% of the class graduates with honors (GPA>3.5). But it is all done the hard way, not through the smoke and mirrors of grade inflation. Oh yes and remember, we are small and there is, well never mind, you can find out from your hosts, or come and talk to us in the Dean's Office or anyone else in Student Affairs. And good luck whatever you do Hals und Bein Bruch, and do I dare to

A bientot!

Jean Paul Revel

Jean-Paul Revel

## HAPPY FUZZY BUNNY WISH SHOW!

www.CripplingDepression.com



YOU WANT TO

REPHRASE THAT?

GOSH, I'M A LUCKY FELLOW

HAVE TO DEAL WITH TECH

### MINTS

### Announcements

The Math Department announces two categories of prizes offered this year to Caltech undergraduates.

The E.T. Bell Undergraduate Mathematics Research Prize: A cash prize of \$500 awarded for the best original mathematics paper written by a Caltech Junior or Senior. Contestants for the Bell prize must be nominated by a faculty member familiar with their work. Students who wish to be considered for this prize should contact a member of the Mathematics faculty prior to the end of the second term to discuss the nature of the research. If the entry is sufficiently worthy, the faculty member will nominate the contestant and act as sponsor. Each student is entitled to only one entry. All contestants nominated must submit their papers in final form to their faculty sponsors by the end of the fourth week of the third term, (April 30). A faculty committee will then judge the papers and announce its decision before the end of the third term. The committee may award duplicate prizes in case of more than one outstanding entry. The name of the winner (or winners) will appear in the commencement program.

The Morgan Ward Competition: Any Caltech freshman or sophomore may enter this contest. An entry may be individual (submitted by one student) or joint (submitted by a group of two or more students). Each student is entitled to at most three entries, of which two may be individual. An entry is to consist of a mathematical problem, together with a solution or significant contribution toward a solution. The problem may have any source, but this source should be stated in the entry. The entries may be judged on the basis of the nature of the problem, originality and elegance of the solution. Any outside references used should be indicated. Entries from each contestant or group must be placed in an envelope and delivered to the Mathematics Office, 253 Sloan, during the fourth week of the third term. The names of the contestant, or the names of all participants in the case of a joint entry, must be written on the envelope only, not on the entry. The Judging Committee will consist of three undergraduate. The judges will select a group of finalists and submit their entries to the mathematics department faculty who will make awards to the winners. Prizes will ordinarily be awarded for the 2 to 4 best entries, the value of each prize being \$75. Prizes for individual entries will be limited to one to a contestant, and no group may receive more than one prize.

Guitar classes at CIT for the spring quarter will meet on Tuesdays in SAC Room 1, starting on April 3 as follows: Beginning Guitar Class 4:30 PM - 5:30 PM. Intermediate Guitar Class 3:00 PM - 4:00 PM. Advanced Guitar Class 5:30 PM - 6:30 PM. Classical and flamenco repertoires are explored, but techniques transfer to other styles of guitar. The Beginning Class includes a jazz/folk chord system. Classes are free to Caltech students and other members of the Caltech community (space permitting). Undergrads can receive 3 units of credit. The instructor, Darryl Denning, has an international background in peformance, teaching and recording (two of his CDs are available in the Bookstore). Mr. Denning can be reached at (323) 465-0881 or by email at: ddenning@caltech.edu. The Guitar Home Page is at:www.music.caltech.edu/guitar.html

The dance troupe will be offering **FREE dance classes** Spring quarter. On Thursdays from 9-10:30pm, an introduction to modern dance series will be taught by professional instructor Liz Maxwell. Ms. Maxwell received her BFA and MFA degrees from The Juilliard School and the University of Washington, respectively. She has spent 30 years in modern dance, touring extensively throughout the US and Europe with several distinguished companies. Relocating to LA in 1994, Ms. Maxwell has been on the faculty of CalArts, CSULB, Moorpark, Loyola Marymount, and Scripps teaching dance technique, composition, and specializing in dance history. These classes will begin on April 12 and run through May 31 in the Braun multipurpose room. No prior experience is required, and no special clothing or shoes are needed. Free ballet classes taught by volunteer instructors will begin April 7. Beginning ballet meets from 1-2pm, intermediate ballet meets from 2-3pm, and advanced ballet meets from 3-4pm. For the beginning class, no special shoes are required. For more information, please visit our website at www.its.caltech.edu/~troupe. To sign up on our mailing list or to reserve a place in the modern class, please send an email to troupe@caltech.edu.

Gay/Lesbian/Bisexual Discussion Group: Looking for a safe and supportive place to discuss issue such as coming out, being out, dealing with family, coping with a homophobic culture, and being GLB at Caltech? Want somewhere just to make new friends? We invite you to the Gay/Lesbian/Bisexual Discussion Group, which meets on the first and third Tuesdays of each month from 8:15 until 10:15pm in the Health Center Lounge. This is a confidential meeting and does not imply anything about a person's sexual orientation - only that s/he is willing to be supportive in this setting. The group usually discusses a particular relevant topic and then moves on to the general discussion. Refreshments are served. If you would like more information, please call ext. 8331

Community Service Opportunities Abound! The Caltech Y offers students and staff a variety of ways to participate in community service. Opportunities include working with Habitat for Humanity, Union Station Homeless Shelter, math tutoring (on or off campus), reading tutoring, and working at local hospitals. One-time community service events are planned each term and opportunities for service on a regular basis exist. Undergraduates with federal work-study can receive \$15/hr for their community service work. To be added to the community service interest email list, or for more information about the Community Service Program, please contact Kristin Abbott at kabbott@caltech.edu or call 626/395-3180. Or, stop by the Caltech Y in the Center for Student Services (formerly Keck House) for a complete listing of opportunities.

### Scholarships

The Financial Aid Office has applications and/or information on the following as well as additional undergraduate scholarships. All qualified students are encouraged to apply. Our office is located at 355 S. Holliston, second floor.

### **Summary information:**

Information, applications and recommendations for the 2001-2002 UPPER CLASS MERI TAWARDS COMPETITION are available at www.finaid.caltech.edu

Please visit our web site at http://www.finaid.caltech.edu/news.html for complete information on the following scholarships:

- \* Scholarships sponsored by SHARE
- \* Win cash in EDFUND photo contest!
- \* Windstar Environmental Studies Scholarship Program for 2001
- \* Vermont Student Assistance Corporation
- \* P.L.A.T.O.
- \* National Institutes of Health Scholarship Program
- \* American Electroplaters and Surface Finishers Society (AESF)
- \* John Gyles Education Awards
- \* Danville-Alamo Branch of the American Association of University Women (AAUW)

**Attention all undergraduate students on Financial Aid:** The last date to request any change to your 2000-01 Financial Aid Award is Tuesday, May 1, 2001. Requests for 2000-01 changes made after May 1 will not be considered. Please contact the Financial Aid Office at Ext. 6280 if you have any questions.

**Summer Work Study**: Information and applications for 2001 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, 2001. Your entire financial aid application must be complete by June 1 in order to be considered for Summer Work Study. If awarded, the Work Study funding will begin with the July 2nd payroll.

Attention: Current Frosh, Sophomores & Juniors! 2001-2002 upper class merit awards. 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. Upper Class Merit Awards are based on outstanding scholastic achievement as demonstrated by exceptional performance in formal classes and/or in independent research, and not on financial need. Last year, students were awarded Upper Class Merit Awards in the amounts ranging from \$13,162 (two-thirds of tution) to \$19,743 (full-tuition). The number and caliber of the applicants determine the level of awards in any year.

Applications are available in the Financial Aid Office at 355 S. Holliston or online at http://www.finaid.caltech.edu. Electronic submissions will not be accepted. The deadline for submitting completed paper applications to the financial aid office is 5:00 pm, April 20, 2001. No

## Upcoming Events

The Caltech Ice Hockey Club will be hosting the MIT Alumni Beaver team to battle for the 15th annual Beaver Cup, Saturday, April 21, 12:45 p.m.–2:30 p.m. at the Health South Training Center in El Segundo. The Health South Training Center is located at 555 North Nash Street, 1/2 mile south of the 105 Freeway off the Nash Street exit. The Admission is free. Maps and other details are available at the ice hockey club web site, www.its.caltech.edu/~iceh.

### Seminar On Science, Ethics, And Public Policy:

Dr. John Harley Warner, Professor of the History of Medicine and Science, of American Studies, and of History at Yale University presents, *Rethinking "De-Humanization": Laboratory Science, Clinical Practice, and the Grounding of Modern Medicine*. Room 25, Baxter Building, Thursday, April 26, 2001, 4:00 PM. Refreshments will be served. Seminars are on the Caltech campus and are open to the community at no charge. For information, contact Michelle Reinschmidt at (626) 395-4087 or michelle@hss.caltech.edu. For a complete list of SEPP Seminars and Harris Lectures scheduled for this academic year, visit our web site: http://www.hss.caltech.edu/ses/SEPP.html

Caltech Library System Presents: Introduction to Endnote 4.0 Citation Management Software. Training includes: Building a database, searching a database, and building a bibliography using Endnote version 4.0. Advanced techniques can also be covered if requested in advance. Presented by Caltech Librarians. April 24 12:00 PM - 1:30 PM in Sherman Fairchild Library, multimedia conference room. Please register at the CLS website: <a href="http://library.caltech.edu/learning/form.htm">http://library.caltech.edu/learning/form.htm</a>. For more information contact: Kathleen McGregor, x6713 or, <a href="http://kathleen@library.caltech.edu">kathleen@library.caltech.edu</a>

### Free Chamber Music Concert:

Wednesday, May 9, 2001, 8:00 pm in Dabney Lounge. This event is Free & Open to the Public.

Event Highlights

BAXTER LECTURE HALL

ADD DAY: LAST DAY FOR ADDING COURSES AND REMOVING CONDITIONS AND INCOMPLETES FRIDAY, APRIL 20

SKEPTICS SOCIETY LECTURE: "NOTHING! THE HOLE IN THE UNIVERSE: HOW SCIENTISTS PEERED OVER THE EDGE OF EMPTINESS AND FOUND EVERYTHING,"

APRIL 29, 2-4:30 PM

Spring Two-day Blood Drive april 25, 10:00 am through april 26, 4:00 pm winnett lounge

To submit a Mint, e-mail mints@tech.caltech.edu or mail your announcement to Caltech 40-58 Attn: Mints. Submissions should be no longer than 150 words. Email is preferred. The editors reserve the right to edit and abridge all material. Deadline is noon Wednesday. Unless specified, all mints will run for two weeks.

## THE CALIFORNIA TECH

Caltech 40-58 Pasadena, CA 91126