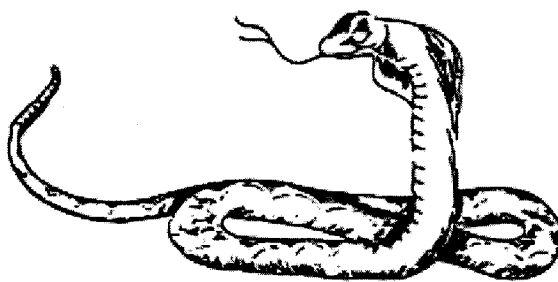


Beaver vs. Beaver

Women's Basketball

January 5, 2001

7:30 at Braun Gym



"As usual, Caltech students have trouble scoring."



The Tech would like to thank brave Conrad at ITS, without whom the paper might not have come out this week.

The California Tech

VOLUME CII, NUMBER 10

PASADENA, CALIFORNIA

DECEMBER 1, 2000

THANKSGIVING IN CENTRAL PARK, PASADENA

BY RYAN COX

For the people at the Union Station Foundation in Pasadena, Thanksgiving is a chance to give people something for which to be thankful. Every year at Thanksgiving, Central Park is filled with volunteers and organizers, tables and chairs, food and a hungry crowd to eat it. Union Station, which regularly provides food, shelter, and other resources to poor and homeless people, aims to provide a hearty Thanksgiving meal to anyone in the community who would otherwise go without one.

For Thanksgiving thousands of volunteers arrived to help with set-up, serving, and clean-up. Beginning at nine a.m. U-Haul trucks and vans were driving into the park to drop off supplies for the day. Tables and chairs were unloaded and handed to the huge crowd of volunteers gathered near the trucks. A large serving area was prepared to handle the long lines of people eager to eat. During much of the set-up and during the meal a band was playing hymns and cheerful music. This year we served 4,600 traditional Thanksgiving meals.

For the first year at Thanksgiving a section of the park was designated as a children's play area and various children's games were organized to entertain the younger visitors. Since no children-oriented events have been planned on previous Thanksgivings, no one was sure how many children would be present. The children's section of the park was organized by Caltech student Jennifer Caron and a small band of assistants. They were told to prepare for between 50 and 300 children, and there were probably around 100 kids at the event. The Caltech volunteers, with the help of many other volunteers, supervised a number of different games and activities for the children.

Jennifer will also be organizing the children's area for Dinner in the Park on Christmas. If you are interested in volunteering on Christmas or Easter or learning more about volunteer opportunities with Union Station please e-mail caron@its.

ME 72 contest trounces Techers

Technical problems and a challenging course result in shutouts dominating the competition

BY JOHN OH

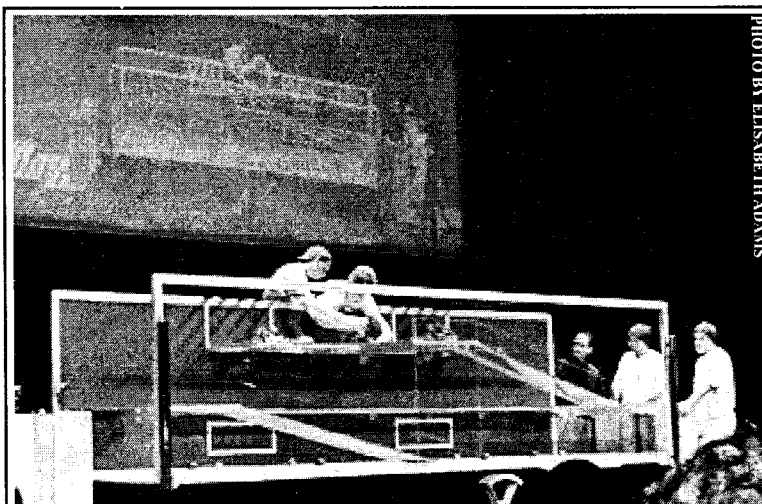
The 16th Annual Caltech ME 72 Engineering Design Contest, better known simply as the ME 72 Contest, proceeded Thursday, November 30 with bumps and stalls, as the contestants were held at the complete mercy of a brutal course. The winners were Jason Wong and Alec Muller, with Steve Schell and Jason Turner coming in second, followed by Dave Gagne and Howen Mak in third.

Held at Caltech's Beckman Auditorium, the ME 72 Contest was the final culmination of a terms work for eighteen Caltech undergrads enrolled in the course of the same name. Lead by Professor Erik Antonsson and assisted by many others, the students, in teams of two, were given a goal, a bag of "junk"—various bits and pieces of materials, machine parts, and motors—and left to their wits for ten weeks to produce a machine to compete against their fellow classmates in Thursday's contest.

A few rules were changed in this year's contest, with each team given a full minute to finish their task, rather than the thirty seconds given previous years. Also, rather

than using wiring to supply power and control, a wireless system was used, with battery packs providing power and a radio control module receiving control input. This module proved to be problematic, setting off motors before the compe-

tition started and making control difficult for the contestants. Instead of the double or single elimination procedures used in previous years, the 2000 ME 72



Steve Schell and Jason Turner work frantically to set up their machine in a contest plagued by a difficult course and technical problems with the new radio control system

Contest contestants faced each other in round robin style. At the end, the four highest ranked teams would square off to determine the winner. The entire afternoon was dominated by double losses, where neither team managed to

score any points. Only four matches in the round robin rounds resulted in any points. Steve Schell's unique jumping crane design was one of the few crowd pleasers, as was Jason Wong's compact runabout that was the only consistent scorer of the afternoon.

Going into the semifinal rounds, the fourth place spot was taken by six teams who had failed to score at all. The situation was resolved by a election amongst the twelve students, with the team of Paul Novak and Michael DeSalvo taking the spot. Paul and Michael were defeated by first ranked Jason Wong and Alec Muller, who lead after the round robin stage with two wins. Steve Schell and Jason Turner moved on to the final round where, after two pointless bouts, their opponents Howen Mak and Dave Gagne conceded.

The final round was the closest and most exciting of the entire contest, with Jason and Alec managing to score while preventing Steve and Jason from doing so.

336 hours a week at Tech

BY NEDA AFSARMANESH

As of Jan. 11, 2001 a new bi-weekly newspaper, "Caltech 336," will replace the recent monthly "On Campus" newspaper. The newspaper will be working out of the Public Relations Office, with Daryn Kobata as editor and Javier Marquez as assistant editor.

The paper will serve all of the Caltech community with hopes of

opening a communication channel between the staff, faculty, and students. "[The] paper was initiated at the behest of Dr. Baltimore and the MAC, who want to keep the community informed of the latest research and campus and personnel news in a more timely manner," said Kobata. Amongst some new additions, some old aspects of the "On Campus" will be kept; one of which is a calendar of academic lectures and campus events.

Zewail to advise the Pope

BY JONATHAN FOSTER

Dr. Ahmed Zewail, Caltech's most recent Nobel Laureate, recently became the second Caltech scientist in the Pontifical Academy following a ceremony at St. Peter's Basilica in the Vatican.

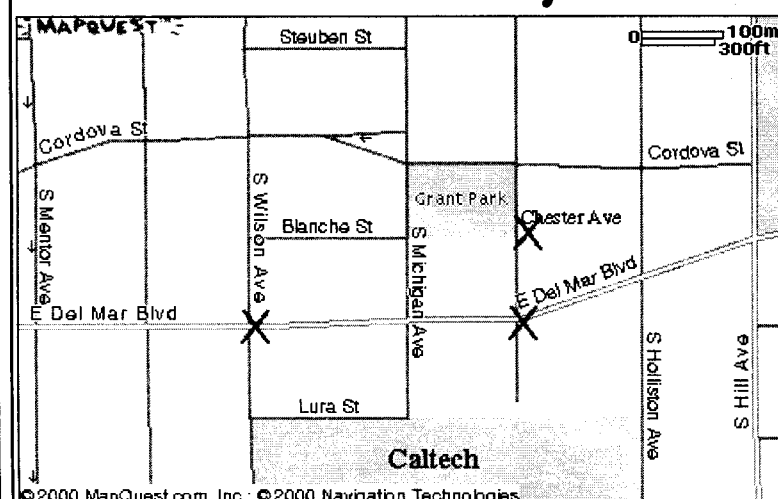
The Pope appoints the 80 academicians (originally 70) who belong to the group, which was established in 1847. Its charter defines its purpose as "The aim of the Pontifical Academy of Sciences is to promote the progress of the mathematical, physical and natural sciences and the study of epistemological problems related thereto." In addition to their role as promoters, the scientists also advise the

Pope on scientific developments.

Candidates are selected "by the Academy on the basis of their eminent original scientific studies and of their acknowledged moral personality, without any ethnical or religious discrimination." The notion of a wide variety of viewpoints is central to the Academy. Pope Pius XII expressed this wish for freedom and variety in his 1940 address to the academy when he said: "To you noble champions of human arts and disciplines the Church acknowledges complete freedom in method and research..."

At the ceremony, Zewail was presented with the insignia of the Pontifical Academy, and spoke with the Pope personally following the Pope's formal address.

Caltech Security Alert



The area north of campus has seen an increase in crime recently, as several students have been attacked within the last 10 days. The map shows the approximate locations of the incidents, as reported in the security bulletins e-mailed to students and staff

Inside the Tech

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Opinion and News

LETTERS TO THE EDITOR

Dear Editors:

It is wonderful that Caltech and our insurance program are concerned about the flu, and are providing free vaccinations. However, with a nation-wide shortage of vaccine, perhaps it would be prudent to rethink the campus immunization program. On average, 110,000 people are hospitalized and 20,000 die due to influenza. Most deaths occur in high-risk individuals: people over 65 and those with chronic health or immuno-deficiency disorders.

Members of the Caltech population do not generally fall into either of these groups. Yes, most of us are overworked and under-rested. We live and work in close quarters with each other—a perfect stew for disease infection and transmission. Yet historically, Caltech students and staff do not drop dead from the flu. We should delay our vaccination program until doctors and hospitals who serve persons truly in need are served. It is unconscionable to do otherwise—to trade a few days of personal discomfort for an easily preventable death.

—Erik Dill

Dear Dean Revel,

I was greatly surprised to see you criticizing the previous week's letter writer for remaining anonymous: "It is customary and proper for critics to present their ideas openly. You know, all that stuff about being able to confront your accuser." I'm guessing that it was precisely because the writer may one day confront the accused that he or she wrote anonymously.

Dean Revel, while I'm sure you have the best of intentions, to us undergrads it is still rather fearsome to think of offending you. After all, you hold the power of overloads, underloads, extensions, medical incompletes, reinstatements, prizes and awards, and who knows what else. Though you can try to leave out personal bias, can you fully succeed when all of these require inherently subconscious character judgements?

Criticize the arguments certainly (your facts lead me to believe biology is one of Caltech's better departments in undergraduate research), but don't chide a writer for remaining anonymous! Remember the Federalist Papers, the essays that led to the ratification of the United States Constitution? They were written by Alexander Hamilton, James Madison, and John Jay... but they were signed:

—Publius

be four student representatives one each from ASCIT, IHC Avery, and Off-Campus. We will pick our student representative at the next meeting.

Martha-Helene will come up with a list of people (2 each) for the Student Health, PE, and Library Committees, which we will vote on at the next meeting. The Student Health Committee will discuss the student insurance program, so we would prefer to have a health ad on it.

Chris says the SNES is ready of installation, though we haven't bought any games yet. The locks for the Playstation 2 will be installed this week.

Meghan says that the copies work and that she will talk with the guy in charge of selling the ASCIT van tomorrow. We WILL sell the van, we WILL sell the van, we WILL sell the van...

Meeting adjourns at 11:05 pm
Respectfully submitted,

Jason Cardema

Jason Cardema

A.S.C.I.T. Minutes

This week: follow the bouncing ASCIT Minutes

NOVEMBER 20, 2000

Minutes of the ASCIT BoD Meeting November 20, 2000

Present: BoD - Emma; Guests: Nate Austin, Christoph Baranec, Jonathan Dama, Dan Liebling
Meeting called to order at 10:12 pm.

Guests: *Little t* business manager Nate Austin says he already mailed copies of the *little t* to advertisers. He is still waiting for money to come in from some ads and is worried that the publisher may still charge tax, depending on whether or not ASCIT, as a non-profit organization, is exempt. Otherwise, Nate says, they are fairly close to budget. The money so far has come out of his and Dave Guskin's pocket, but they are not in a hurry to be reimbursed. He will contact Eric when the final figures are in, by the second week of next term.

Christoph, Co-Social Veep of Ricketts, requests \$200 multihouse funding for the Audioflex concert earlier this term. No interhouse funding yet, since Ricketts saves that for Apache. He will get copies of receipts for the record to give to Sean.

Jon gives us an update on the CLUE. The Fall and Winter grade distributions from last

year are up. They will work on Spring, but are worried about the quality of the data. Eric will try to get the Spring data from the registrar. The old CLUE data will be imported at some point.

Jon says that the computerized DVD library checkout system should be ready by next Monday, just in time for finals. Laura will donate her old computer. Should the user interface be graphical or command line? Eric suggests something with drop boxes. They will work on bar code reading, using a CueCat donated by Chris. Eric also asks Jon if they could add a web-based scheduler for the Screening Room, based on the user's donut account and not their UID. Also, BestBookBuy is willing to provide us with data, but the Caltech lawyer says we can't collect any money from them.

Dan comes in with a cable used to sync the two ASCIT laser lights. He requests reimbursement for buying the cable, but says he will gladly donate the 20-cent bolts he also purchased to attach the lights to the truss. Should there be a check-out system on donut for the ASCIT lights? No, we should just have the social director be in charge of them.

Martha-Helene asks me to

write that the Women's Glee Club will be having a concert next weekend. I think she also said something about coming in drag.

General Meeting: Eric informs us of the Junior class BBQ that was held last weekend to discuss commencement speakers. The cost to ASCIT is about \$200-\$300.

Melinda says that the Ritz-Carlton Huntington has just charged us \$750 for parking for the formal from last year. It's so late that we were wondering if they forgot.

The BoD will have dinner with Tom Mannion on Sunday, De-

cember 3 if it's available. Our backup dates are December 5-7.

Chris contacted Tom Mannion about having the In 'N' Out truck come on campus as an incentive for students to fill out the transportation survey. But Tom wants to do survey incentives the old-fashioned way, with houses that get 75% participation to receive a dinner or something like that.

Miriam Feldblum is looking for recommendations for students to be on the Renovation Committee, which will meet over a year to discuss changes to the student houses. There will

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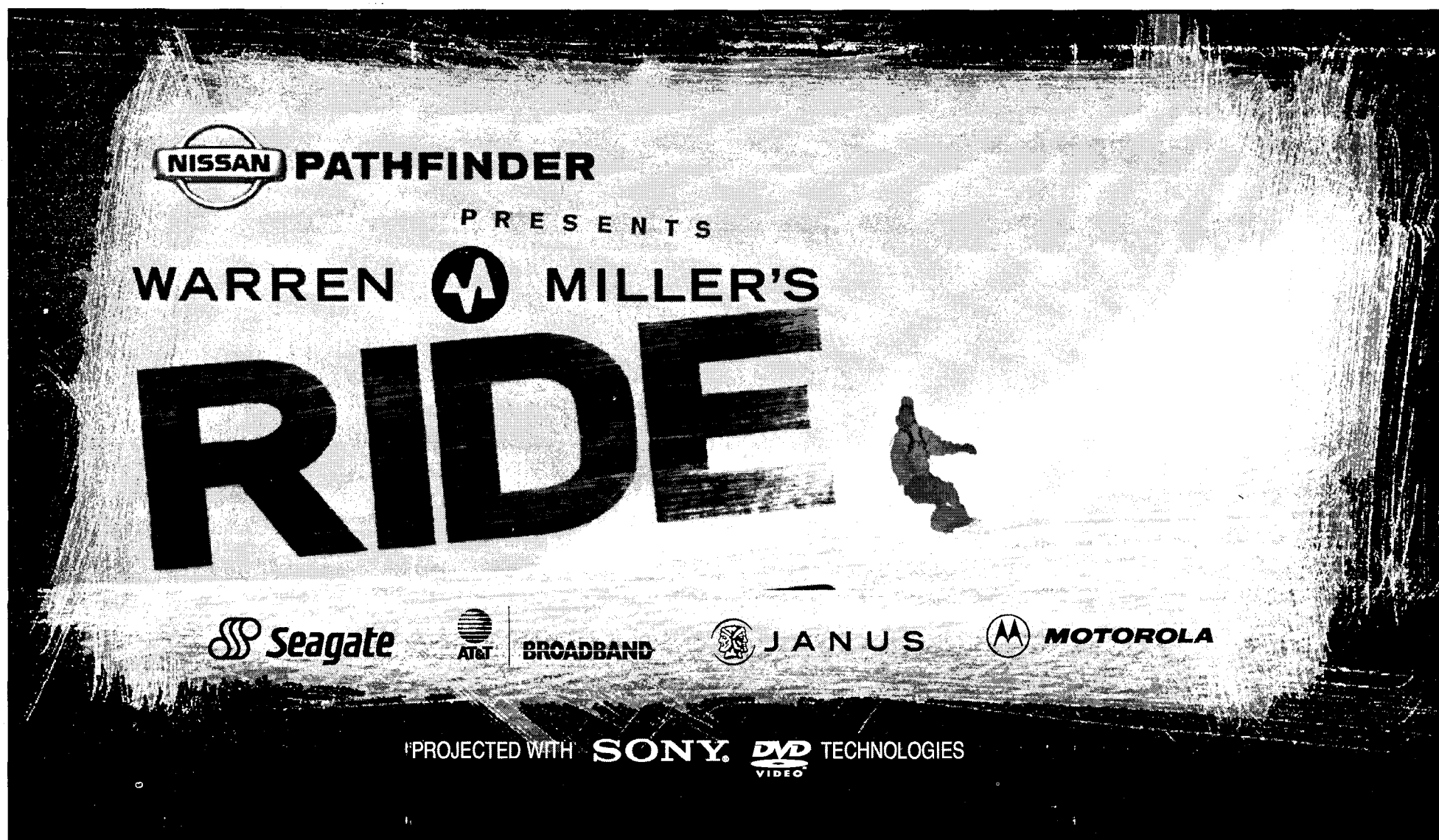
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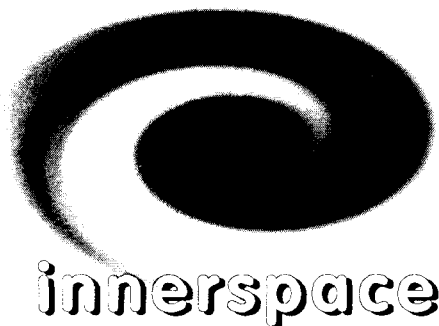
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Innerspace and ASCIT

It Can't Be That Bad



By Jason Meltzer

The past few issues of the Tech have contained a number of upset letters from the undergraduate population. I have published some pretty critical (some might say harsh) articles over the years concerning student life at Caltech, but I must take issue with the comments I have read.

Many Innerspace columns have dealt with the misperception of Caltech by prospective students (during Prefrosh Weekend) and Freshmen (during Rotation). I certainly hold fast to the ideas I previously presented: that Prefrosh Weekend does indeed mislead some students, and that Rotation misleads many. These issues typically dealt with the social life. I have rarely criticized the Institute when it comes to academics, which the letter by Anonymous and Dean Revel primarily dealt with. Now I will defend this aspect of Caltech life, because it's really Caltech's only redeeming quality for an undergraduate.

Let me first say, if you are a freshman, *get some sleep!* You're on pass/fail for a reason! You need to stock up now so you can go without for the next 3 years. If you're really overworked as a frosh, I suggest the following remedies:

- (1) Take fewer classes: there's no law that says you have to take all 486 units during your freshman year.
- (2) If you're already taking the minimum number of units and still feel overworked, participate in

fewer outside activities. Don't join clubs or sports if it's killing you. And if you're social life is really so great that it's eating up that much time, then I'm jealous; you deserve no sleep.

(3) Be more efficient: don't work in groups. I know it's hard, but I've often found that, at least for me, the more people around, the slower homework is finished.

(4) If you've already taken suggestions 1-3, consider changing schools while you still have a chance! Go somewhere easy (like Harvard) and get a 4.0 and a social life. Sure, there aren't as many nerds, and they don't have the great M/F ratio that we do, but you'll get used to it.

With that said, I will move on to more specific points. Let's begin with classes. Everyone should know before coming to Caltech that academics here are difficult. Students take many classes, none of which are easy. This information is available in the Course Catalog, in material Caltech sends to prospective students, in reviews by outside sources, and (if you're lucky) during Prefrosh Weekend. This is the Marines of academia. You may be somewhat surprised at the difficulty level, but you should not be *that* surprised.

While we take many classes, we learn many things. I truly believe that Caltech undergraduates learn far more than students at other universities (I have to believe this to

keep my own sanity). We may not get exposed to every minute detail of a discipline; rather, our classes teach us the important, fundamental concepts. We don't sweat the small stuff — you can learn that later in graduate school or in industry. And it is true that you will not learn every concept in every class you take. Some things you will forget (like all of Bi 1), but you will learn something, and it will be important. I must also add that it's only during Freshman and Sophomore years that your schedule will look like a random assortment of unrelated subjects. By the time you are a Junior or Senior, you will probably have figured out what you want to major in, and your classes will be more focused on that area. When that happens, classes fit together somewhat better, and the firehose is less broad, if not less powerful.

How about the Student/Faculty

Don't forget to take the Innerspace Happiness Survey at <http://www.its.caltech.edu/~jasonm1/survey.html>

ratio? Yes, it's 3/1, and no, you won't notice the benefit of that... if you don't look for it. Truth is, there are many opportunities for research at Caltech, many more than at any other university. Because we have so many faculty and so few undergraduates, most faculty are happy to take on an undergraduate (or many, in some cases) to be a research assistant. I started working with faculty (in Astronomy, which isn't even my department!) during my Freshman year, and I have continued ever since. I am, in fact, writing this column from a computer at the 60-inch telescope on Palomar Mountain, a top-notch observatory. In my time at Caltech, I have observed at Palomar on many occasions (usually once or twice per term). This is not an opportunity typically available to most undergraduates at other schools, espe-

cially those who are not astronomy majors. At Caltech, all I had to do was talk to a professor.

I have worked on a number of significant research projects here, and I am happy with all of those experiences. In every case, it was not difficult to get involved. All I had to do was talk to a professor. I would go so far as to say that most faculty at Caltech would like *more* undergraduates to become involved in research and would welcome any that do, but it is the students who are the limiting factor. These opportunities do not just land in your lap (usually)... you have to put in some effort to seek them out. But once you do, it's not hard to find faculty to work with you.

The argument that students don't have time to do research during the year because of classes is clearly ridiculous. In just about every major there is a "Research in..." class, which will give you some number of units in your field toward graduation for doing research during the year. If you don't want units, you can usually get paid for it. Sounds a lot like MIT's UROP program to me, except that there's no central organizing body. But really, is it so hard to use the Web to search for faculty to work with? And, as I mentioned above, once you've found someone, it's not hard to start a research project. Basically, the point is: go talk to professors! They don't bite.

As far as classes go, it's true that many faculty here are not the best lecturers, but I think overall they are pretty good. Even if you think they're terrible, so what? There's a reason we have books and problem sets and friends! Lecture is not the place you should be learning all the material. It's a nice addition to a book, but you really can learn a lot just by reading the texts and doing your homework. You will also learn a lot from fellow students. On top of that, if you want to talk with a professor about concepts from

class, they are usually available to do so. You just have to ask. To compare Caltech professors to those at other universities and say that they are poorer teachers is not quite fair. Sure, they might not present the material the best in class, but they probably understand it better than most other people in the world. Who would you rather learn from: a trained lecturer or the world's expert on a particular field?

Finally, I have to put in a plug for Innerspace. If you came to Prefrosh Weekend in either of the past two years, you had opportunity to read my Prefrosh Weekend column. Both years, I gave what I thought was a critical review of undergraduate life at Caltech. I told you that you'd do more work than you think that you probably wouldn't have: a girlfriend, that you wouldn't get much sleep, and that the social life sucks. Yes, all of this information was available in the student newspaper. It was not at all censored by Caltech, and it gave a pretty harsh view of life here. If you didn't read it or chose to ignore it, then you missed out. The Institute is not going to try to discourage students from attending any more than it already does: by rejecting people it thinks can't cut it and informing students that they will be expected to perform.

So, is everything "hunky-dory" at Caltech for undergraduates? I'd say it depends on who you are, of course. Overall, students here struggle. The administration and faculty know that, and I think they try their best to relieve the pressure some. That's part of the reason we have an Honor System, and why the students (and Houses) have so much freedom. I remember reading a description of MIT by an alum that said that the student mentality there was "us against the institute." I don't think that's the case at Caltech. Here, we're all in it together, and that shows through in all aspects of student life.

A.S.C.I.T. Minutes

NOVEMBER 27, 2000

Minutes of the ASCIT BoD Meeting November 27, 2000

Present: BoD—Melinda; Guests: Christoph Baranec, Dan Daly

Meeting called to order at 10:09 pm.

Guests: Christoph gets the multihouse funding check for Ricketts he requested last week in exchange for some receipts.

General Meeting: Eric tells Sean that he has Donut Man receipts (for Friday morning donuts) for the term that we need to write a check for. Has Dinkar

asked us for money yet? Expect to write a check for the Junior class picnic soon.

Dominika comes in to bring Chris an order of curly fries and cheesesticks. There is a rumor going around that the Coffee-house delivers. It's not true.

The BoD will have dinner with Tom Mannion of Sunday, December 3. Dietary requests?

Eric and Sean purchased the first component of the Screening Room this weekend—the large-screen projection TV. They bought it with the help of

Adam Lawton, who now has lots of frequent flyer miles. The purchase was made at Fry's Electronics, and yes, we fell for that 4-year "performance guarantee" stuff. We will buy the audio system and have the grand opening at the beginning of next term.

Eric says that the DVD library should be ready to go. We have software for the checkout system written by the donut guys. We are just waiting for the locks to be installed on the cabinets.

Martha-Helene is looking for help to create the online submission form for the UROH. She has a list of committee appointments:

Student Health Committee — Matt Reese PE Committee — Rachel Thessin, Jon Ladd

The Library Committee person is still to be decided.

10:30 pm —A knock on the door. Dan Daly comes in to talk to us about the Honor Key, a Caltech tradition that ended in the 1960's. He first heard about it while talking to an old Fleming alum. He pulls out a *little t* (really little) from 1938. According to the miniscule text,

the Honor Key symbolized student involvement in extracurricular activities. It was based on a point system.

Certain activities were worth a certain number of points and if a student earned 30 points in one year, that person would be eligible to receive the Honor Key.

Dan wants to see it reinstated because he believes it will encourage student involvement outside their respective houses. It would also bridge the gap between now and the Caltech of yesteryear.

We could receive some funding for it from alumni.

Eric finds a reference to the Honor Key in a comic strip from the Big T of 1956. We wonder if students would be interested in bringing this award back.

We would like to have more incentives to get more students involved in outside activities. We could also add an additional leadership award to recognize individuals who have made significant contributions to clubs. Dan will find out how much keys cost and we'll make the

decision next term.

Laura says she suggested a similar idea at the beginning of the year but someone thought it was a stupid idea.

ASCIT Van! Meghan talked to the guy in charge of it who says he's "still working on it."

We need to make ASCIT nominations for the Student Housing Renovation Committee.

Martha-Helene is already the representative for Off-Campus. The BoD approves nominating Eric, Laura, and Chris.

Laura and Martha-Helene will finish the ASCIT page for the Big T by Winter Break.

Emma reports that about 300 people replied to the CS 1 survey. She will compile the statistics and put them up on the web.

She will follow up with an article on it for the Tech.

Last meeting of the (calendar) year adjourns at 11:19 pm.

Respectfully submitted,

Jason C. Cardema

Jason C. Cardema



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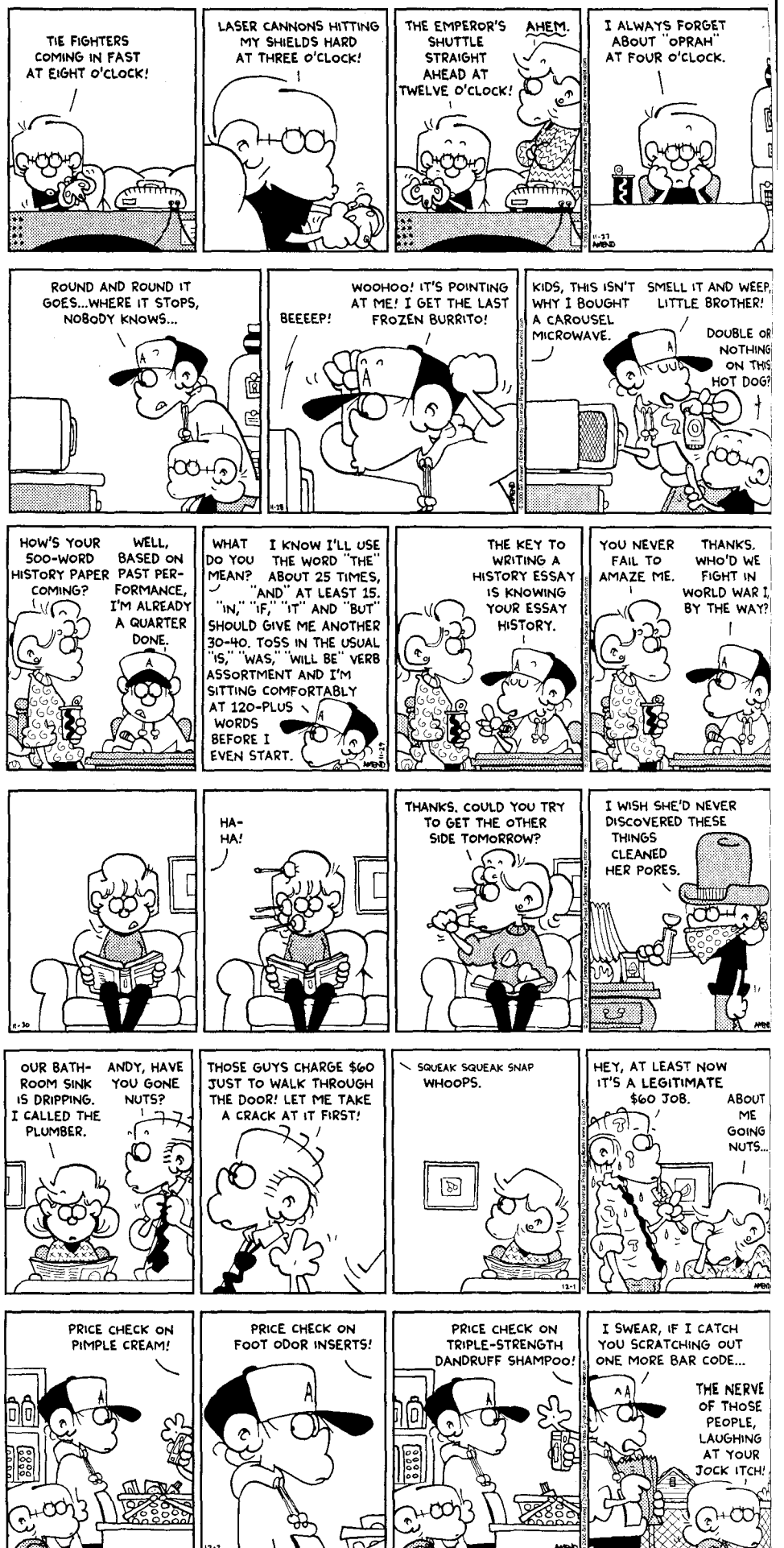
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BEST IN SHOW (PG-13)
Fri. - Thu. [11:30] 1:40 3:50 6:00 8:10 10:20

DANCER IN THE DARK (R)
Fri. - Thu. [11:30] 2:35 5:40 8:45

BILLY ELLIOT (R)
Fri. - Thu. [12:00] 1:00 2:30 3:30 5:00 6:00 7:30 8:30 10:00

No One Under 17 Will Be Admitted

REQUIEM FOR A DREAM (NR)
Fri. - Thu. [12:15] 2:40 5:05 7:30 9:55

WHAT'S COOKING? (PG-13)
Fri. - Thu. [11:45] 2:15 4:45 7:15 9:45

A TIME FOR DRUNKEN HORSES (NR)
Fri. - Thu. [12:00] 2:00 4:00 6:00 8:00 10:00

THE AMATI GIRLS (11:15am)

COLORADO
2588 E. Colorado (626)795-9704

YI YI (NR)
Fri. & Mon. - Thu. [4:05] 7:40
Sat. & Sun. [12:30] 4:05 7:40

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Dean's Corner

All about the holidays

by Jean-Paul Revel

the advertisements for items of jewelry worth several thousand dollars, presented as if everyone could reasonably expect to find such baubles in their stocking on Christmas morning. I know that until recently things have been very good for many people, but have they really been that good?

You may think I am completely crazy, but one of the other things I did was read parts of the Harvard University catalog on the web. I was looking at it to see how much work their students were expected to do. As I was turning virtual pages I came across a section which discussed how final examinations were to be handled. Quite a difference from Caltech. It brought to mind taking examinations when I was a first-year student at the university in my home town. We sat in a huge lecture hall with a single seat left empty between each two students. The time for examinations was synchronized for all courses, and the students were

seated in the room so that it was very unlikely you would be anywhere near a classmate. Proctors walked up and down the aisles, ready to pounce should they see anything they thought suspicious.

But back to Harvard: their final examinations are given in the classroom, at a time determined by the Registrar's Office (I think), for example, from 9 a.m. (shudders) to noon. Appropriate behavior is described in the Faculty of Arts and Sciences Handbook as follows, hmm... "Examination Rules: In order to avoid any possible suggestion of improper behavior during an examination undergraduates should refrain from communication with other students while an exam is in progress. They should also not retain or refer to any books or papers during an examination except with the express permission of the instructor or proctor. Eating and drinking are not permitted in any examination room. For violation of the examination rules or dishonesty in an examination a student may be required to withdraw from the College. Students who

fail to obey the instructions of an examination proctor are liable to disciplinary action."

At MIT exams are also taken in a strictly supervised environment. Their catalog says "Take home final examinations are not permitted for any undergraduate subject." It all sounded pretty forbidding, and I'm glad our honor code allows us a rather more relaxed atmosphere. Of course an exam is an exam and taking it in the comfort of one's room or in a library carrel, with munchies at your elbow, still requires that it be taken in a manner above all reproach. The work has to be your own, and has to be done in the allotted time. All of that is specified in our Honor Code. Good luck on your finals!

While I am on the topic of the honor code I need to broach a topic that concerns me. And that is the increasing number of instances in which students, having witnessed a particular event, refuse to name who was involved. It is quite admirable not to rat on one's friends. It is good that students take good care of each other. But one needs to balance this expression of friendship with the good of everyone else. It is important to recognize that the freedoms derived from living under the honor code are derived from an explicit understanding that everyone will behave in a manner that is above

reproach. The confidence expressed in you by allowing you great freedom assumes that everyone is willing to be responsible for their actions. Anyone carrying out a prank must leave his or her identity. All too often pranksters hide behind anonymity. All too often they are helped to do so by their "friends" and do not take the opportunity to do things in a manner above reproach. They say to the rest of us, "I can act as I wish without paying attention to you." That is not in the spirit of Caltech, that is taking advantage of others in the community. And these are the people whom their "friends" want to protect? Shielding each other from responsibility is an ultimately self-defeating behavior. We can enjoy the liberty and the convenience which are the result of living under the honor code only if we're all willing to take the consequences of our actions.

So good luck on the finals, see you all in the New Year, rededicated to support the Caltech way of doing things. Maybe everyone should read the Honor System Handbook over the break! And include "acting responsibly" as one of your important New Year's resolutions. Till next year, A bientot!

Jean Paul Revel
Jean-Paul Revel



The commercial celebration of Christmas starts earlier and earlier. Not that this is a novel insight/complaint, but this year it was brought home more forcefully because I watched more television over the Thanksgiving break than I usually do. I twisted my ankle a while back and took the 4-day window to nurse it along, hoping it would mend itself. So I saw several movies, including the titanic "Titanic," which I had not seen before. A great movie, but what impressed me were the toys offered for kids (?) of all ages. There were the ads for Barbie dolls, and for PlayStation. There were also the usual ads for exotic perfumes, you know, the supposedly soulful pronouncements suggesting that life's problems can be solved by purchasing fancy looking cut-glass bottles containing a few drops of precious pheromones from France. But what was really astounding were



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Mints

ANNOUNCEMENTS

H&SS Division offers the following Selected Topic and New Course for winter term 2000.

Law 133 Business Law and Economics This course provides an introduction to modern business organizations, from both the legal and social-scientific points of view. First we will examine the basic principal-agent relationship at the core of all organizations, from both a legal and economic stand point. We will then explore the governance of modern organizations, both public and closely held.

Topics covered will include corporate liability for employees' wrongdoing, managers' fiduciary duties, corporate opportunity, shareholder voting, shareholder suits, proxy contests, mergers and acquisitions, and a brief introduction to securities fraud.

The course may be taken more than once if the topics differ. Instructor: Arlen TTh 1:30-3pm BLH

SES/PI 133 Philosophy of Physics In this course, we will examine conceptual issues that arise within classical (i.e. non-relativistic) quantum mechanics. The mathematical formalism of quantum mechanics is well understood, and its predictions well-confirmed. There remains, however, the beguiling question of how the world could possibly be that way. In particular, we will examine two problems. 1) The standard formalism for quantum mechanics includes two different rules for the evolution of a physical system. One rule applies when the system is not being measured, the other when the system is being measured. This raises two fundamental questions: what is measurement, and why should a system behave differently when it is being measured? 2) In certain types of physical system, distant particles can coordinate with each other across a great distance -- so great that any signal sent from one to the other would have to travel faster than the speed of light. How is this coordination possible? A number of incautious thinkers have drawn outrageous conclusions from these features of quantum mechanics: quantum mechanics proves that we have free will, or that all things in the universe are interconnected, or that ESP is possible. We will not be discussing any of these claims explicitly, but students who take this course will acquire the resources to examine these claims critically.

This course presupposes no prior knowledge of quantum mechanics: all of the central problems can be raised using ery

simple exams. It will be assumed that all students have a solid grounding in basic mechanics (such as ought to be provided by a good high school education). The course will make use of some tools from elementary linear algebra: vectors and vector spaces, matrices and linear operators. Students who have not yet completed Math 2a may wish to consult with the instructor before enrolling. Students must also have completed their freshman humanities requirements before enrolling in this course. Instructor: Hitchcock - W7pm 127 Bax

*Copies of HSS course schedules are available in 228 Baxter. All other selected topic course descriptions are posted in Baxter.

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.

The Caltech Administrative Committee on Art has arranged for an appointment of a world-famous sculptor, George Rhoads, as an artist-in residence starting January 2 for a six week period. Ten Caltech undergrads and grads will be selected to make metal or wood sculptures

that they design themselves, along the lines of Mr. Rhoads' interests and skills. Interested students should apply to the Institute Committee on Art by way of robertsj@caltech or by Institute Mail to J.D. Robert MC (164-30), no later than December 8. Each applicant should explain in a paragraph or so, something about his/her interest and/or experience in sculpture and skills in metal or wood working.

EVENTS

Science, Ethics, and Public Policy Lecture Series for Fall Quarter 2000:

The William and Myrtle Harris Distinguished Lectureship in Science and Civilization presents Dr. Peter Galison, Professor of the History of Science and of Physics, Harvard University, Poincare's Maps and Einstein's Clocks, Friday, December 1, 2000 4:00 p.m. Beckman Institute Auditorium

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 Website: <http://www.hss.caltech.edu/ses/SEPP.html>

SCHOLARSHIP

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

*** The American Electroplaters and Surface Finishers Society (AESF)** is offering scholarships to upper class undergraduate and graduate students who are interested in careers in the surface finishing field. Applicants must be full-time and majoring in chemistry, chemical engineering, environmental engineering, materials engineering, materials science, metallurgy, or metallurgical engineering. To apply, ap-

plicants must submit an application form, statement describing career objectives, list of educational achievements, official transcripts, and three letters of recommendation from teachers, employers, or professors. Applications are available in the Financial Aid Office. Please send completed application materials to: AESF Scholarship Committee, American Electroplaters and Surface Finishers Society, Central Florida Research Park, 12644 Research Parkway, Orlando FL 32826-3298. Entries must be submitted to the AESF Scholarship Committee by April 15, 2001.

*** The Swedish Club of Los Angeles, Inc.** plans to award two \$2,000 scholarships: one in International Relations and/or Diplomacy and one in Mathematics and/or the Physical Sciences. Applicants must be upper class or graduate students in an accredited college or university in Southern California with strong academic qualifications. To apply, applicants must submit official transcripts, letters of recommendation from two professors, and an essay describing their academic goals. Please send application materials to: Peter Franta, Swedish Club of Los Angeles, Inc., Scholarship Chair, 19122 Lindsay Lane, Huntington Beach, CA 92646-2226. Entries must be submitted to the Swedish Club of Los Angeles Inc. by December 1, 2000.

*** The National Academy for Nuclear Training** is offering \$2,500 scholarships to eligible students majoring in nuclear engineering, power generation health physics, electrical or mechanical engineering, or chemical engineering with nuclear or power option. Applicants must be U.S. Citizens, enrolled full-time in a four-year accredited institution, minimum GPA of 3.0 or higher, and interested in nuclear power careers. Additionally, scholarships will be renewed for current Academy scholars who maintain their eligibility. For further information on the National Academy Educational Assistance programs, please visit www.nei.org. Applications are available in the Financial Aid Office. Please send completed application materials to: Na-

tional Academy for Nuclear Training, Scholarship Review Committee, P.O. Box 630, Princeton, NJ 08541-630. Entries must be submitted to the National Academy for Nuclear Training by February 1, 2001.

***The Measurement Science Conference (MSC)** has established scholarships to students in an Engineering or Science Quality Assurance degree program. The scholarship program places emphasis on papers of projects that discuss the advancement of measurement science technology. Applicants must be U.S. citizens, have a overall grade point average of 3.2 or higher, completed at 24 units of upper division courses in Engineering or Science degree or five courses in a Masters Degree Program in Quality Assurance. Current members of the Measurement Science Conference Committee are ineligible for this scholarship award. Also, applicants must be able to attend the Measurement Science Conference luncheon held on January 18, 2001, at the Disneyland Convention Center in Anaheim, California. Applications are available in the Financial Aid Office. For further information regarding MSC Scholarships you may contact: Rick Careyette, MSC Scholarships Chairperson, Teledyne Electronics Technologies, Marina del Rey Facility, 12964 Panama Street, Los Angeles, CA 90066-6534. Entries must be submitted to Teledyne Electronics Technologies by December 1, 2000.

***THE GLAMOUR MAGAZINE'S 2000 TOP TEN COLLEGE WOMEN COMPETITION** has begun. The competition is open to all full-time juniors regardless of major or GPA. All entries must be postmarked by January 31, 2001. Contact the Dean of Student Office, 102 Parsons-Gates for the applications.

To submit an event for the Mints, contact mints@ugcs.caltech.edu or mail your announcement to Caltech 40-58 Attn: Mints. Submissions should be brief and concise. 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.

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