

**The
Results
are In
(-valid,
that is)**

The California Tech

Vote
on the Formal next
Monday

Volume XCV, Number 24

Pasadena, California

Friday, April 22, 1994

Caltech Undergrads Still Worth Their Medal

by Barbara Green

Brundage Wins Hinrichs Award

Michael Brundage is the winner of the 1994 Hinrichs Memorial Award. This award, established by the Board of Trustees, is given in memory of Frederic Hinrichs, Jr. who served for more than twenty years as a dean and professor at the Institute. This award is made annually to the senior who has made the greatest contribution to the student body and whose qualities of character, leadership, and responsibility have been outstanding.

Mike was selected for the exceptionally capable leadership and service he has provided during his years at Caltech. His most significant contribution has been two years of work with the Caltech Honor System. He has done a superb job of carrying out his duties as Chairman this past year,

SEE BRUNDAGE, PAGE 9

Gimbel Takes Mabel Beckman Prize

Joan Marie Gimbel has won the 1994 Mabel Beckman Prize. This prize is awarded annually to a woman student upon completion of her junior or senior year and is made in recognition of demonstrated academic and personal excellence, contribution to the Institute community, and outstanding qualities of character and leadership.

Joan Marie, a senior in Engineering and Applied Sciences, has demonstrated qualities of outstanding leadership and service during her four years as an undergraduate at Caltech. She has been a very active and involved member of the Freshman Admissions Committee. In addition, she has served on the Un-

SEE GIMBEL, PAGE 9



Tech undergraduate prize winners Gimbel(left) and Brundage(right) smile for the camera.

PHOTO BY RICH ZITOLA

"This Week's Fight: BOD vs. IHC"

"ASCIT Bylaws Amendment": What Bylaws Amendment?

by the Tech editors

For those of you confused by all this bylaws talk, we hope this will help answer the question "What Bylaws Amendment?"

The ASCIT BOD had approved an amendment to the bylaws, to be voted on by the ASCIT membership. Under current bylaws, the IHC appoints undergraduate student representatives to faculty standing committees. The proposed amendment would have given this power to the BOD.

Surprisingly enough, the IHC was opposed to this. Also, the proposed amendment (to Article XII, section 6—see Zack's info-article) did not include the all important sentence, "These positions are not Corporation offices and shall be open to any undergraduate." A lot of controversy was generated, for this and other reasons. Most of the BOD seemed to feel that it was appropriate to add this phrase, since the goal was simply to bring ASCIT closer to the committee representatives.

The amendment was originally scheduled to be voted upon at the IHC Chairman elections. The vote was delayed by one week to allow more time for discussion and to confuse the Tech editors on what to print. It was rescheduled for Monday the 25th. At this week's BOD meeting, it was withdrawn, in order to allow even more time for discussion, to allow the possibility of modifying it (including addition of the clarification specifically allowing non-members of ASCIT to serve on committees), and to confuse the Tech editors even further. Discussion articles still appear in this week's Tech. Note that further postponement of the election, without withdrawing the proposal, was not possible due to bylaws restrictions on the time between proposal of and voting on an amendment.

The Situation

by Zackary Dov Berger

Sixteen "standing committees" are listed on pages 350-351 of the *Caltech Catalog*. Of these, the Graduate Study Committee includes no undergraduates; the Convocations Committee has as its student members the elected presidents of the senior and junior classes.

The following portions of ASCIT documents are relevant to student-faculty committees.

Article XII (Committees), Section 6 of the ASCIT Bylaws: *Student members shall be appointed to faculty committees by the Interhouse Committee in accordance with appropriate clauses of the faculty bylaws. These positions are not Corporation offices and shall be open to any undergraduate.* Resolutions of the Board of Directors, V (The Interhouse Committee):

Section 1. *The Board of Directors recognizes the existence of the Interhouse Committee as a body entirely separate from the Corporation, existing to fulfill the purpose outlined in its Definition.*

SEE SITUATION, PAGE 6

ASCIT View

by David R. Derkits

This article will address the following points:

- 1) Why did BOD approval of the amendment appear rushed? What justified quick action?
- 2) The primary reasons behind the BOD's decision to approve the amendment.
- 3) The reasons given to the BOD by the IHC to keep the appointments with the IHC and the opposing viewpoints, both weighed by the BOD in its decision.

Why Did Passage of the Amendment Appear Rushed?

Student members of Faculty-Student Committees are appointed in the second half of third term. If the change is to take effect this year, it is necessary that the amendment be approved by the middle of the term. At the beginning of the term, the BOD had to schedule the Special Election for the replacement IHC Chairman for Monday, April 18. It was decided that this would be the best time to put an amendment to vote, in order to avoid multiple elec-

SEE ASCIT VIEW, PAGE 6

IHC View

from the IHC

The ASCIT Board of Directors [BOD] has an article in this issue of the Tech arguing that they could do as good a job as the IHC in appointing students to the Faculty-Student Committees. We, the IHC, feel that we are better suited to the job because we have certain unique attributes:

*By its very nature the IHC has enforced diversity. It is structurally required of the IHC to have a wide cross-section of opinions, experiences, and views of the Caltech student body. This cross-section results in fairer appointments.

*The IHC is made up of representatives of the Houses, but acts collectively for the good of the community and the student body as a whole. This means that the IHC will not act in the best interests of a specific house when the campus at large is the primary concern of the issue at hand.

*The Presidents are very accessible because they are widely dispersed and can be easily found by a large

SEE IHC VIEW, PAGE 8

Roger Sperry Dies

from Caltech Public Relations

Roger Wolcott Sperry
1913-1994

Roger W. Sperry, Nobel laureate and Board of Trustees Professor of Psychobiology, Emeritus, at Caltech, died of muscular dystrophy early Sunday morning, April 17, 1994. He was eighty.

A native of Hartford, Connecticut, Sperry earned his bachelor's degree in English literature from Oberlin College in 1935, then focused his attention on psychology, earning his master's in that subject in 1937, also from Oberlin. For his doctorate, he studied zoology, earning his degree from the University of Chicago in 1941.

His academic career was equally diverse. He held fellowships at Harvard from 1941 to 1946, where he worked in the Yerkes Laboratories of Primate Biology, and performed military service from 1942 to 1945 by taking part in the OSRD Medical Research Project on Nerve Injuries. He taught as an assistant professor in the University of Chicago's department of anatomy until 1952, then in 1952-53 served as an associate pro-

fessor of psychology at the same school and simultaneously as the section chief for neurological diseases and blindness at the National Institutes of Health. In 1954 he became the Hixon Professor of Psychobiology at Caltech, where he remained until his retirement in 1984.

Sperry's best-known research involved "split-brain" patients, people who had had the connection between their left and right brain hemispheres surgically cut. His work showed how the two hemispheres function, independently and in concert, and continues to have important implications not only for medicine but for education and philosophy as well. Among his many early accomplishments, he showed by observing the regeneration of cut nerves to the targets that there was a remarkable specificity of reconnection. This led in the early 1960s to a new theory explaining how neurons grow, assemble, and organize themselves in the brain by means of amazingly intricate chemical codes that are controlled by heredity.

In later years, Sperry's ever-active mind turned more and more to philosophy. According to the Janu-

SEE SPERRY, PAGE 8

In This Issue...

...you won't find any more boxes telling you to write for us. But if not enough of you come to the Coffeehouse today at 12:15 to do some writing assignments, we just might have to continue filling up space with these annoying messages. And you wouldn't want that to happen, would you?

YOU HAVE BEEN WARNED

Letters to the Editor

Misleading Headline Provokes Repsonse

I congratulate *The Tech* for attempting to stir up discussion by publishing opposing views on a controversial topic. It is too bad that the opposing view was unavailable to be published with Patricia Schwarz's article. However, I probably wouldn't have been stirred to reply myself if it had been printed.

Upon opening *The Tech* and seeing the title "A Liberal's View of Homosexuality," I gladly began reading to see what Ms. Schwarz thought about the topic. However, I was very disappointed to find it was more of a discussion of her thoughts on religious conservatives in the Republican party. Perhaps the original commissioning was a contrast of why she doesn't like Republican religious conservatives and why someone else doesn't like Democratic non-religious liberals. If this is the case, perhaps Ms. Schwarz is right on topic and the editors chose a poor title.

Whatever the situation, Ms. Schwarz only discussed homosexuality in the last few paragraphs. The rest of the article focused on her objections to the behavior of religious conservatives. Please either label your opinion columns better. If that topic was what was commissioned to Ms. Schwarz, I would ask her to stick to it.

I look forward to hearing Ms. Schwarz's views on the subject of Homosexuality itself in future issues.

Matt J. Carlson

A Message From the little T

Do you know of a great restaurant hidden away in an obscure location? Are you in charge of a club or organization at Caltech? Do you have any information which might improve the quality of life of your fellow Techers? The 1994-95 *little t* is a great way to tell the undergraduate community. The 1994-95 *little t* will be published this summer for distribution at the beginning of next year. Submissions of restaurant reviews, descriptions of clubs, tips on how to get around and have fun in L.A., corrections of errors in previous editions of the *little t*, or any other information which might help get someone through Caltech while remaining sane and happy will be cheerfully accepted. Material can be submitted by e-mail to

Dear Editors,

I'd like to point out what may have been an editorial mistake in last week's edition of *The Tech*. The article by Patricia Schwarz was titled "A Liberal's View of Homosexuality." After reading it, I was disappointed to find out that it was about politics rather than, as the title suggests, homosexuality.

I suppose this shouldn't surprise me, given that liberals and conservatives are notorious for taking real human concerns and making Issues™ out of them. If I'd known it was going to be Yet Another Debate Between Liberals and Conservatives (yawn), I wouldn't have bothered to read the article.

I will try to be more careful in my reading of *The Tech* in the future.

Respectfully,
Matthew Derer

The headline for the article was chosen solely by the editors. We regret that we chose such an inappropriate title and will attempt to title our articles more appropriately in the future. -eds.

Please send submissions for letters to the editor to The California Tech, Caltech 40-58, Pasadena, CA 91125, or by e-mail to editors@tech.caltech.edu. Deadline for submissions is Monday at 5pm on the week of publication.

The editors reserve the right to edit or refuse to print any letter for any reason.

little@ugcs.caltech.edu or by mail to "little t editors, Mail code 26-58." This year's editors are Michael Radford, Laurent Stadler, and Jennie Yoder; the business manager is Steven Skovran.

I COULD SAVE YOUR LIFE...
Please save mine.

For more information
Call 1-800-824-WILD

The Houston toad produces alkaloids — pharmaceutical wonders that may prevent heart attacks or act as an anesthetic more powerful than morphine. Yet, due to habitat loss, it is on the very brink of extinction, another member of the Endangered Species List.

NATIONAL WILDLIFE FEDERATION
1400 Sixteenth Street, N.W., Washington, D.C. 20036-2266

Editorial

I was at a Jack In The Box a few days ago, and I ordered a burger. I spent three minutes staring at the menu posted above the cashier, and said, "A Bacon cheeseburger, one large root beer, and one large water, please."

She replied, "A large what?"
"Water."

She put the order on the computer, gave me my receipt, and immediately set to preparing my drinks. She gave me a large paper cup filled with 60% ice and 35% root beer and a significantly smaller cup of ice water. Strange, I thought I ordered a large water. Had I forgot to specify? No, she even asked me, "A large what?" Perhaps they just have a policy regarding water sizes or something. Somewhat disgruntled but not enough to complain, I sat and ate my burger in silence while I pondered. I concluded that the situation was just like most people: she heard me, but she did not listen to me.

Ponder the significance of this a bit. Although children are taught that "hear" and "listen" are synonymous, we give them slightly different meanings: "Can you hear this?" "Listen to me!" "I can hear you just fine, thank you." "I'm listening." To hear is just to acknowledge the existence of a sound, but to listen is to understand, to let the communication of ideas succeed by letting it affect one's actions. I've never seen the phrase "to hear intently." Ever. How many times have you found yourself

in a debate with someone where you were so intent on voicing your own opinions that you failed to give extra thought to what the other was saying? I dare say that I tend to stop listening whenever I have my own opinions about something.

We needn't restrict it to just acoustics, either; we have the same attitude towards body language, or text. How many people ignore the body language of others, or just superimpose their own concepts? (I don't want to get into the subject of rape, but I've certainly heard to phrase "When she says no, she really means yes" all too often.) Of all the people reading this right now, how many will actually give a thought to the matter? I'd probably just read it and think, "Oh yeah, that's what he thinks, but I believe that..." It's amazing to think that in our day-to-day transactions, we may be experiencing a great deal of data loss just because of our previous biases.

It would all do us a great deal of good to stop talking, to stop imposing our ideas on others and just listen. Our eyes and ears existed long before we began to communicate; maybe Mother Nature intended for us to look first. You hear me?

Correction. Are you listening to me?

Wei-Hwa Huang

Cornell University Interactive Theater Ensemble to Give Workshops

by Laura Verhoff

The Cornell University Interactive Theater Ensemble will be returning to campus on Thursday and Friday, April 21 and 22, to present two days of workshops. These workshops relate to a wide range of thought-provoking issues such as sexual harassment, race and gender biases, and problems with communication.

Last year, the group, consisting of members of Cornell's theater department, presented their unique program. Not only did participants find it entertaining and informative, but they were also impressed by the accuracy of the depictions and found the lively discussions that evolved because of the group's presentation to be enlightening.

The group's purpose is to further understanding and awareness of various issues, such as interpersonal relationships, diversity, gender relationships, academic behavior, and other issues in the workplace. The group, rather than lecturing, acts out vignettes presenting the issues. The actors then receive questions from the audience, while remaining in character, pertaining to their actions, and their motivations and feelings behind these actions. Afterwards, the audience, as a whole, discusses the skits. This method of discussion brings out different perceptions, furthering the audience's understanding and awareness.

There will be two workshops each day at Beckman Institute Auditorium. The morning sessions will run from 10 a.m. to noon, with the afternoon sessions from 3 to 5 p.m.

on Thursday and 1:30 to 3:30 on Friday. Most of the skits this year will be new. Open seating is available this year, but there are a limited number of spaces. Any undergraduates interested in attending one of these workshops should contact the Residence Life Office at x6194.

ASCIT Wants to Hear From You

What issues do you think ASCIT should address this term? Please write them down on a piece of notebook paper and deliver it to Page 210 or mail it to MSC #392. Thank You.
Angie Bealko

Editors' Corner

The deadlines we have set up are still in effect as printed last week. The standing deadline for regular news submissions, barring unforeseen circumstances, is Tuesday at 5p.m.

We are currently reworking our policy on the conservative vs. liberal viewpoint column, and we hope to see it return in next week's issue. Our current plan is to publish a topic and solicit responses from all interested people; ideas for actual topics are welcome as well. Next week's topic will be Gun Control policy and its results so send in your views soon!

If you are interested in writing for the Tech once, twice, or even on a regular basis, drop by the Tech staff meeting Friday at 12:15p.m. in the Coffeehouse and enjoy some free pizza while you're there!

In This Issue:

LETTERS TO THE EDITOR.....	.....2
EDITORIAL.....	.....2
EDITORS' CORNER.....	.....2
ASCIT NEWS.....	.....3
SPORTS REPORT.....	.....4
WORLD NEWS.....	.....5
CRIME AND INCIDENT BEAT.....	.....5
COMICS.....	.....7
GAMES AND PUZZLES.....	.....9
75 AND 25 YEARS AGO.....	.....9
EVENTS AND NOTICES.....	.....12

ASCIT Re-Election

The ASCIT Executive Committee met and decided that a re-vote on the referendum regarding the funding of the ASCIT formal is necessary due to the ambiguity of the wording of the ballot. This vote has been scheduled for Monday, April 25.

Katharine Sippel
ASCIT Executive Committee Chair

The California Tech

Caltech 40-58 SAC, Pasadena, CA 91125
phone: (818) 395-6153
e-mail: editors@tech.caltech.edu
ISSN 0008-1582

VOLUME XCV, NUMBER 24
APRIL 22, 1994

EDITOR-IN-CHIEF Jeff Denniston	STAFF WRITERS Toby Bartels Margaret Belska Zack Berger Ross Brown Connie Chang Jeff Goldsmith J. Random HercFrosh III Wei-Hwa Huang Michael Kantner Lauren Laurent Stadler Adam Villani
MANAGING EDITOR Cherish Bauer	CONTRIBUTORS David Derkits Tom Dmukauskas Flora Ho Mitra Hartmann Axel Kratel Sakae Suzuki Sam Webb Charles Witham
COPY EDITOR Kenneth Lee	ILLUSTRATIONS EDITOR Annaliese Beery
LAYOUT EDITORS Wei-Hwa Huang Tom Grundy	SPORTS EDITOR Anil Roopnarine
BUSINESS MANAGER Dov Rosenberg	CIRCULATION Rebekah Mills Wei Lin
PHOTOGRAPHER Richard Zitola	

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

Letters and announcements are welcome. All contributions should include the author's name and phone number and the intended date of publication. Submit copy (preferably on Macintosh 3 1/2" disk) to the Tech mailbox outside SAC room 40, or e-mail to editors@tech.caltech.edu. The editors reserve the right to edit and abridge all submissions for literacy, expediency, etc. All articles are the property of the authors. Authors and columnists retain all intellectual property rights.

The California Tech is distributed free. Issues will be mailed off-campus upon receipt of \$10 per year to cover third-class postage and preparation costs. Printed by News-Type Service, Glendale.



This week's ASCIT movie!

Snow White
and the Seven Dwarfs

Friday, April 22, 1994
Baxter Lecture Hall
7:30 and 10:00 p.m.
\$1.50 ASCIT/\$2.00 others
April 29:
A Perfect World

ASCIT Minutes for April 6, 1994

by David R. Derkits

Present: BOD, Paul Ainsworth, Garrett Choi, Jeff Denniston, José J. Garcia, Miguelito Herrera, Michael Kantner, Tatsuya Murase, Jim Murdoch, Dennis Ugolini, Eric Uhrhane, Dan Vaughn, Chris Waite, Chris Walker, Pete Young, Richard Zitola, Gavin Claypool

New Business

José Garcia requests ASCIT funding for *Semina Latina*, a week long celebration of Latino culture planned for early May. He requests \$335 to help cover an expected shortfall of \$670. The BOD approves \$335 (7-0-0). The organizers of *Semina Latina* also are interested in showing a movie; Penny will talk with Mike Coward about this.

Garrett Choi is here to talk about Prefrosh Weekend. The Ice-Cream Social will be primarily an ASCIT event with CCF providing people to run it. There will be two "Life at Caltech" presentations, in which members of the BOD, BOC, and IHC will make presentations and answer questions. There will be an ASCIT party Friday night and ASCIT Movies Saturday night. The barbecue dinner on Saturday will be open to everyone, and it will be decompression-style this year. House events will be publicized in some way. Clubs should seek ASCIT BOD approval for any activities that involve prefrosh. KSA apparently would like to have a barbecue on prefrosh weekend. The BOD agrees that there is not enough time in the prefrosh agenda for the event, and the event is not approved.

Tatsuya Murase and Chris Waite introduce the Skeleton Crew, a new club. They request ASCIT recognition. The BOD moves to recognize Skeleton Crew (5-0-2).

ASCIT Formal

Chris Marsh has been seeking outside funding for the Formal; he anticipates it will cost ASCIT half as much as previous Formals.

BOC Bylaws Proposal

Chris Bryant still hasn't heard many comments about his proposal to separate the BOC from ASCIT.

Apparently, some people believe that if they are not ASCIT members they are not under the honor system. Chris Bryant emphasizes that this belief is incorrect; Caltech wants one venue for enforcing the honor system among undergraduates.

A visitor mentions the option of requiring ASCIT membership to solve the problem.

House Funding Policy

Ben mentions that some Houses

want the multihouse fund to cover two-House events.

Club Funding Policy

There is discussion on whether ASCIT should fund clubs. Tatsuya mentions that some students do not want ASCIT to fund certain types of clubs. He mentions again his idea for a club association which would find sources of funding and distribute money among the clubs. Mike Kantner believes that the current club funding policy works pretty well and that ASCIT and the GSC should keep control of their funding rather than delegating it to a subcommittee to avoid another layer of bureaucracy. Chris B. sees Tatsuya's organization more as a body which could go around and get money from other sources, such as the administration. Kantner argues that there is a lack of other funding sources and that ASCIT is a major funding group for clubs.

It is mentioned that starting clubs takes a lot of effort, and that club funding encourages people to start clubs.

The BOD mentions that the new club funding policy is not finalized yet. Dennis Ugolini would like to see this issue go to the vote of the student body, perhaps through a poll.

Bike Rack

Mike Kantner states he has a verbal agreement on responsibility for the repair costs of the bike rack. The BOD moves to give Kantner a loan of \$181.05 to cover the repair (6-0-1). Penny will check with those involved in the mishap to reach a final agreement acceptable to ASCIT.

little t

Rich Zitola presents a final budget report. He will request BOD approval of compensation at the next meeting.

Directors' Reports

Upperclass Director-at-Large

Penny will purchase more toner for the copier. No major developments yet in obtaining a copier through Graphic Arts under their centralized program.

Director for Social Activities

Sign-ups are still open for positions on the Executive Social Committee.

The prefrosh party is on track.

Chris continues to look for funding for the ASCIT Formal.

Director for Academic Affairs

Flora checked with the Registrar about the maximum limit on PE units.

It would improve student government if ASCIT could maintain

SEE ASCIT MINUTES, PAGE 5

Johnson Speaks on Galileo Project

Extra Visits Complement Jupiter Mission

by Ross Brown

This past Wednesday night at 8 p.m., Dr. Torrence Johnson, a JPL scientist, gave a Watson Lecture at Beckman Auditorium entitled "Galileo: En Route to Jupiter." He spoke about the *Galileo* spacecraft's voyage to Jupiter and the discoveries it has made along the way.

The *Galileo* spacecraft, designed at Jet Propulsion Laboratory, was developed in the late 70s for a launch in the early 80s. Various setbacks pushed the launch date back to October 1989.

Since *Galileo* was to be launched from the Shuttle and because of the *Challenger* accident, the *Galileo* propulsion module (the part that rockets the spacecraft towards its objectives after deployment from the Shuttle) could not include a liquid-fueled stage. The *Galileo* team was forced to use a smaller, less powerful solid-fuel rocket, which might have doomed the mission, if not for the creative trajectory dreamed up by the project team.

Instead of shooting straight out towards Jupiter, the *Galileo* instead was to fly deeper into the inner solar system, cruising past Venus, then back to Earth, then to Gaspra, past Earth again and through the asteroid belt with an encounter with Ida on its way to Jupiter. This is referred to a VEEGA (Venus Earth Earth Gravity Assist) because each time *Galileo* went past these two planets, its velocity was increased, thus making up for the lack of rocket power.

A fortunate side benefit of this convoluted trajectory is that *Galileo* made a variety of discoveries along the way. The project team had

Galileo look at Venus with its near-infrared imaging instruments which were able to penetrate various different cloud levels. At some points, infrared radiation from the surface was picked up, agreeing nicely with *Magellan's* data from its mapping mission.

There was also the unique chance to train *Galileo's* instruments on Earth, giving the project team a look at our own home planet, as if it were an alien world like Venus or Jupiter. Dr. Johnson showed a clip of images retrieved from *Galileo* showing the rotation of the entire face of Earth with the clouds moving across its skies. Images like these are unattainable by satellites because they are too close to the Earth's surface and cannot include the entire face of the planet.

At its closest approach, *Galileo* was only 305 kilometers (190 miles) from the surface of the Earth, which is effectively inside the atmosphere and about the lowest the Shuttle orbits. To put the high speed of *Galileo* as it cruised through the Earth-Moon system in perspective, it took the Apollo astronauts three days to just get to the moon from Earth, while *Galileo* crossed the orbit of the moon in only twelve hours!

Galileo dipped into the inner asteroid belt between the two Earth flybys, and then went straight through, on its way to Jupiter. As it did so, *Galileo* became the first spacecraft to fly past asteroids at close range. It was extremely fortunate that *Galileo* could do this because the chances of encountering an asteroid in the asteroid belt are very slim.

Despite the image of the excit-

ing asteroid chase scene in *The Empire Strikes Back* where Han Solo and his friends were mere meters away from rocky death, the asteroid belt in our solar system is very sparse. Dr. Johnson held up a soccer ball (in honor of the upcoming World Cup game here in Pasadena) and stated that if that was an asteroid, the next nearest one would be miles away in San Diego.

The first asteroid encounter was with Gaspra, a small lump of rock that rotates very slowly near the inner edge of the asteroid belt. *Galileo* captured about ten successive images on its way to the asteroid that gave the project team a clue as to the asteroid's rotation period and overall shape. Dr. Johnson showed an animation clip which displayed the surface of one side of the asteroid from various angles that the scientists at JPL created using a very powerful imaging system.

The next asteroid encounter, this time, between the second Earth flyby and before the Jupiter exploration, was with Ida. Ida is an asteroid that is about twice as large as Gaspra which we now know has a moon. Ida's moon is a one kilometer rock in a slow orbit around Ida at a distance of about one hundred kilometers. Ida's moon, still unnamed, was discovered in the process of downloading the useful information from the onboard one gigabyte tape recorder. The information was downloaded in such a way that only parts of the image were received so that the project team could selectively pick out images containing the asteroid and erase all of the "empty sky" bits.

SEE JOHNSON, PAGE 11

ASCIT NEWS

- With the agreement of all parties involved, and to encourage further discussion, the BOD has moved (7-0-0) to **rescind** the faculty-student committee **amendment**. Articles representing both sides of the issue still appear in this *Tech*, as the issue will be discussed over the next few weeks. It is anticipated that this amendment will be put to vote in the **class officers election** later this term.
- The vote on the ASCIT **Formal** referendum has been **invalidated** by the ExComm because the ballot was considered confusing. The **re-vote** will be held this Monday, 25 April 1994.
- The Board of Directors would like input on the practice of **funding the general budgets of clubs**. Recently, ASCIT has been reevaluating its role in this area. The ballot in Monday's election will include a **non-binding question** on club funding, along with the opportunity for voters to give anonymous comments. The BOD values your input on this important issue; please take the opportunity to share your opinion.

- ASCIT **Teaching Award** Nominations close today. Ballots and envelopes are in every House.
- Congratulations to **Stanley Grant III**, the newly elected IHC Chairman.
- **Kumar Raman** has been appointed as Presidential Staff Recorder.
- The BOD has approved \$500 for **KELROF** 1994.
- **ASCIT Donuts** are still a Friday morning tradition, despite their one-time absence during prefrosh weekend.
- Special thanks to those who helped make **prefrosh weekend** a success this year. Thank you to the administration and the Admissions office for giving the **students** a major role in the event, and to those students who helped run the many activities.
- Copies of ASCIT BOD **Minutes** are available by mail free of charge **on request** to students, faculty, and administrators. Requests should be sent to Secretary, ASCIT 64-58.
- Please bring **15 copies** of handouts to meetings of the Board of Directors.

Entrepreneurs Off to a Quick Start

by Joe Long and Joe Andrieu

There's a brand new club in town, and we think you might like it. The Entrepreneur Club came together as a result of the conference "Caltech and Entrepreneurship: Where Are We and Where Should We Be Headed?" held in coordination with the ground-breaking ceremonies for the Gordon and Betty Moore Laboratory of Engineering. The conference was a great success, reaching through the hierarchies of Caltech to stir involvement from alumni, faculty, students, and administrators alike.

In coordination with Gary Lorden of Student Affairs and Rosana

Gatti of the Career Development Center, a group of students created a club to encourage and support entrepreneurial activities here on campus. Due to mainly serendipitous circumstances, the initial stages have been forged by undergraduate students, but everyone involved in the club is eager to cross the barriers and get active involvement from graduate students, faculty, and administrators. Surveys went out this week to advertise the new club and to begin creating a network of campus entrepreneurs. We hope to see many new faces at our opening meeting April 28th.

SEE ENTREPRENEURS, PAGE 8

the Haircutters

Caltech students—
Save 20% with student ID
on shampoo & style cut

MEN \$16 (regular \$20)
WOMEN \$20 (regular \$25)

(818) 449-1022
(818) 449-6967

1009 E. Colorado Blvd.
Pasadena

Offer expires June 30, 1994



Two-Star Award Winner
by the Southern California
Restaurants Association

2475 EAST COLORADO BLVD., PASADENA
FOR RESERVATIONS: (818) 449-8018

Open 7 Days • Cocktail Lounge • Food To Go Orders Welcome • Free Parking in Rear

MANDARIN CUISINE AND SEAFOOD

LUNCH SPECIAL

Choice of 13 entrees
11:30 a.m.-3 p.m. from **4⁵⁰**

EARLY BIRD DINNER SPECIAL
Choose from 13 items
3-7 p.m. DAILY ONLY **5⁹⁵**

CLASSIC DINNERS

Sunday-Thursday 3-10 p.m.
Friday-Saturday 3-10:30 p.m.
Between Altadena Dr. & Sierra Madre Blvd.

Tech Track Team Tests Citrus at Invitational III

by Jim O'Brien

At the final home meet of the season, Caltech hosted teams from Citrus College, Biola University, Cal Lutheran University, and the National Junior Team of Australia. At the conclusion of the meet we all got together in Tournament Park for an "International Relations Barbeque". Since several members of the team had just arrived back from Australia on the Track Team's Spring Break Tour Down Under, there was much to talk about.

The highlights of the meet for the Caltech women were two school records. Gretchen Larson took the Triple Jump mark out to 33'-1/2" and Radhika Reddy established a mark of 10:42.11 in the rarely contested 2000 meter Steeplechase (a newly approved women's event by the IAAF).

Cailin Henderson showed herself to be back on track with a second place finish of 5:15.4 for 1500 meters and a win in the 3000 meters in 12:15.94. Rebekah Mills threw the shot 34'-3", heaved the Javelin, and clocked 13.8 seconds in the 100 meters for a new Personal Record. She also blazed the 200 meters in 29.32 for yet another Personal Record performance, and threw the Discus 100'-7".

The young Australian woman dominated the meet, primarily in the sprints and the jumps. Caltech lost the dual meet contests to both Australia and Citrus College by only five points in each as the team sorely missed top scorer Amy Oldenburg.

The men fared much better this weekend as the Battlin' Beavers defeated Cal Lutheran, Biola, and Australia. However Citrus proved too much to handle in dishing out a 9 point Dual Meet loss. Competing without our top two distance running threats, Ned Bowden and Andy Zug, we fought right down to the wire and came up a little short. Individually, we had some fine performances.

Matt Metz threw the Javelin 158'-9" and also finished the 110 high hurdles in 17.65 seconds, while placing second in the 400 Intermediate Hurdles in 61.5 seconds. Ben Siron set a new Personal Record in the Pole Vault at 11'-0", placing third and improving 1 1/2 feet over last year.

Rob Bergeron had a breakthrough meet in the sprints. Besides anchoring the 400 Relay, he set two Personal Records with an 11.70 second effort over 100 meters and 23.83 in the 200 meters. "All-Purpose" Adrian Hightower ran 100 meters plus both hurdles races, triple and high jumped, and ran a leg of the 400 Relay. Karl Thulin threw the discus 102'-2" which is well of his best and Matt Goff equalled his high jump best of 5'-11 1/2". Art Greenburg placed second overall in the 400 meters with a Personal Record performance of 53.14 and Ron Stieger also settled for second in the 800 at 2:05.47.

On April 9th, about half the team will travel down to San Diego for the highly competitive UCSD Invitational.

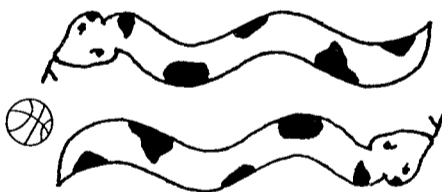
Discobobulus Basketball

PLACE	HOUSE	GAMES WON	PTS FOR	PTS AGAINST
①	PAGE	6	302	216
②	LLOYD	5	219	167
③	RUDDOCK	4	208	184
④	FLEMING	3	270	233
⑤	DABNEY	1	193	238
⑥	RICKETTS	1	168	265
⑥	BLACKER	1	142	199
TOTAL			1502	1502

	PTS/GAME	PTS/PLAYER	FOULS	FOULS AG.
PAGE	50.33	11.62	45	34
LLOYD	36.50	9.52	28	27
RUDDOCK	34.67	10.40	36	32
FLEMING	45.00	14.21	22	22
DABNEY	32.17	14.85	19	21
RICKETTS	28.00	9.33	5	13
BLACKER	23.67	8.88	25	31
TOTAL			180	180

Game Results

	BLACKER	DABNEY	FLEMING	LLOYD	PAGE	RICKETTS	RUDDOCK
BLACKER	—	35-33	24-44	9-20	33-45	19-22	22-35
DABNEY	33-35	—	32-38	28-36	38-59	39-34	23-36
FLEMING	44-24	38-32	—	37-38	58-63	54-34	39-42
LLOYD	20-9	36-28	38-37	—	38-45	52-21	35-27
PAGE	45-33	59-38	63-58	45-38	—	51-31	39-18
RICKETTS	22-19	34-39	34-54	21-52	31-51	—	26-50
RUDDOCK	35-22	36-23	42-39	27-35	18-39	50-26	—



Individual Scores

	TOP SCORERS	HOUSE	POINTS	AVERAGE	TOP FOULERS	HOUSE	FOULS
1st	Josh Moats	Page	80	13.33	Srdjan Sobajic	Ruddock	8
2nd	Arun Durjaj	Fleming	74	12.33	Todd Gottula	Fleming	8
3rd	TJ Creath	Ruddock	73	12.17	Josh Moats	Page	8
4th	David Zito	Dabney	52	8.67	Jason Hong	Page	7
5th	Anil Roopnarine	Dabney	48	8.00	TJ Creath	Ruddock	7
6th	Todd Gottula	Fleming	44	7.33	Fred Caldwell	Dabney	6
	Sam Bauknight	Lloyd	44	7.33	Chris Chang	Page	5
8th	Steve Tsai	Page	42	7.00	Rob Chapman	Lloyd	5
9th	Near Maigalit	Blacker	39	6.50	Andrew Grangaard	Blacker	5
	Jim Schaff	Ricketts	39	6.50	Mike Herreira	Dabney	5
11th	Mark Hammig	Ruddock	36	6.00	Albert Sonmar	Blacker	5
12th	Tom Zavisca	Lloyd	32	5.33	Eddy Vataru	Page	5
	George Papa	Page	32	5.33	Mark Hammig	Ruddock	5
14th	Virgil Everett	Page	31	5.17	Steve Tsai	Page	5
15th	Greg Harper	Fleming	28	4.67	Anil Roopnarine	Dabney	5
16th	John Parks	Fleming	27	4.50	Tom Maccarone	Lloyd	4
17th	Steve Skovran	Dabney	26	4.33	Doug Yule	Ruddock	4
18th	Doug Yule	Ruddock	25	4.17	Tom Zavisca	Lloyd	4
19th	Eddy Vataru	Page	23	3.83	Near Maigalit	Blacker	4
20th	Eric Loffsgaarden	Fleming	21	3.50	Sam Bauknight	Lloyd	4
21st	Ahmed Abbas	Dabney	20	3.33	Arun Durjaj	Fleming	4
	Scott Lyons	Fleming	20	3.33			
	Matias Eliovich	Ricketts	20	3.33			
	Marcos Santos	Ricketts	20	3.33			

Spring Garden Chinese Restaurant

Mandarin & Szechwan Cuisine—Best in Town!

LUNCH & DINNER

Lunch Special

Monday–Friday, 11:30–2:30 P.M.

5% discount with Caltech ID

CATERING & FOOD TO GO

Beer • Wine • Banquets

AMPLE FREE PARKING

187 N. Sierra Madre Blvd., Pasadena, CA 91107

(818) 796-2531



LAEMMILE THEATRES

ESQUIRE

2670 E. Colorado Blvd.
(818) 793-6149

Academy Award Winner
Best Foreign Film

Belle Epoque

Daily 4:30, 7:00, 9:25 p.m.
Sat–Sun Bargain Matinee 2:00 p.m.

COLORADO

2588 E. Colorado Blvd.
(818) 796-9704

"Enchanting... sensual"
—Siskel & Ebert

SIRENS

Daily 5:15, 7:30, 9:50 p.m.
Sat–Sun Bargain Matinee 12:45 p.m.
Sat–Sun Regular Matinee 3:00 p.m.

ASCIT Minutes April 6, 1994

FROM PAGE 3

communication with student members on Faculty-Student Committees. flora suggests that we have some members of the committees act as liaisons by serving on the Educational Policies Committee.

Please continue to submit CLUE reviews. It's not too late.

Interhouse Committee Chairman

The IHC now meets every Monday at 1:30 p.m.

Sign-ups for Faculty-Student Committees will be going up soon.

Treasurer

The ASCIT records are being audited, as is usual this time of year.

At least 370 Club Questionnaires have been returned. Ewald is tallying the results.

Secretary

Motion to interview the applicants for the ASCIT appointed offices next week passes (6-1-0).

David was one of several students who attended a core curriculum dinner at the MOSH's House. The discussion was excellent; the students were able to share their views on the core and some possible improvements were evaluated. David believes this forum is excellent for discussing issues; perhaps it should be used by the BOD in the future.

Vice President/BOC Chairman

Chris Bryant's office hours will be every Tuesday, from 9:00 a.m. to 10:00 a.m., in the ASCIT Office (SAC 64).

Chris B. and flora attended a Multicultural Task Force meeting. At the meeting, a plan to coordinate



Bosnia

Serbs invaded Gorazde (a city declared as a safety zone). This occurred shortly after UN officials claimed to have reached a satisfactory cease-fire with the rebels. Twenty people were killed and fifty-five were wounded.

President Clinton advocated a diplomatic—not an aggressive—approach to relieving tensions in Bosnia.

The UN asked the United States and the other countries in its membership to approve the use of more aggression in the form of wider Bosnia air rates. This was in response to the attack on Gorazde.

South Africa

During Nelson Mandela's cam-

event funding—written by Sue Bunker and Kim West—was handed out. Perhaps ASCIT can join in this effort. A copy of the plan will be distributed to each BOD member.

Chris B. will not be able to make the next two BOD meetings; he will be out of town on both occasions.

President

Angie is still working on the

paigned visit to the Cape Town region, three people were trampled to death by the crowds and twenty-one people were injured.

An agreement is near between Zulu Chief Buthelezi and the government. This could mean an end to the South Africa vote boycott.

Egypt

On Sunday, two PLO leaders abandoned peace talks with Israel in Cairo. The reason cited was Israel's refusal to free militant prisoners. Another reason was Israel's refusal to allow Palestinian courts to have jurisdiction over foreigners.

Japan

Michio Watanabe announced his decision to give up his leadership of the Liberal Democratic Party's third largest faction in a bid to gain the post of prime minister.

On Monday, Watanabe backed out of his plan to leave his party and seek the post of the prime minister.

Lebanon

Lebanon asked a Baghdad mission to leave the capital after Iraq refused to waive the diplomatic immunity of embassy diplomats suspected of killing an Iraqi dissident.

parking situation, the ATM, and the GSC-ASCIT-Administration joint committee.

Angie mentions a meeting of the master key committee. A new master key and card swipes were discussed.

Perhaps, instead of ASCIT Donuts, the BOD could serve ASCIT Pancakes. This option would be less



by Kenneth Lee

4/14 2:20 p.m. A two-way radio belonging to Caltech was stolen from a rolling tool box cart parked on the northeast side of Catalina One, Building 362.

4/11 1:00 p.m. to 4/15 6:40 p.m. A Silver Toyota Celica valued at \$2,800 was reported as stolen, and searches of the area for signs of forced entry turned up negative results. The victim then reported the theft to the Pasadena Police Department.

4/18 12:53 p.m. A suspicious person was observed walking out of the Del Mar parking lot recycling center with two blue bags of aluminum cans. When stopped and asked for identification, the suspect could not produce any. He was then told to put the cans back and informed that he could be arrested for trespassing. The suspect dutifully complied.

4/19 6:15 p.m. A suspicious person was observed walking into the southwest entrance of the Beckman Institute. Security surrounded the area and soon apprehended the suspect for trespassing on private property. The suspect was searched and was found to be in the possession of burglary tools (a screwdriver and two marbles), a cellular phone, a Sony Discman Player, an NEC Relay Pager, and a Versatel Quick Cash ATM Card. The suspected was turned over to the Pasadena Police Department and arrested.

4/24 12:15 a.m. Someone was reported to be setting off fireworks in the north field of Braun Gymnasium. When security arrived, there were no signs suspicious persons or fireworks in the area.

4/25 6:55 p.m. Someone reported that water balloons were being thrown at cars on California Boulevard. When security arrived, one broken water balloon was found, but a suspect was unable to be located.

This Week's Total: \$2,800 + a Two-Way Radio

expensive and might benefit more students.

Angie's office hours are from 2-4 p.m. on Tuesday this week. In future weeks, her office hours will be from 3:30 p.m. to 5:30 p.m. every

Wednesday, in the ASCIT Office, SAC 64.

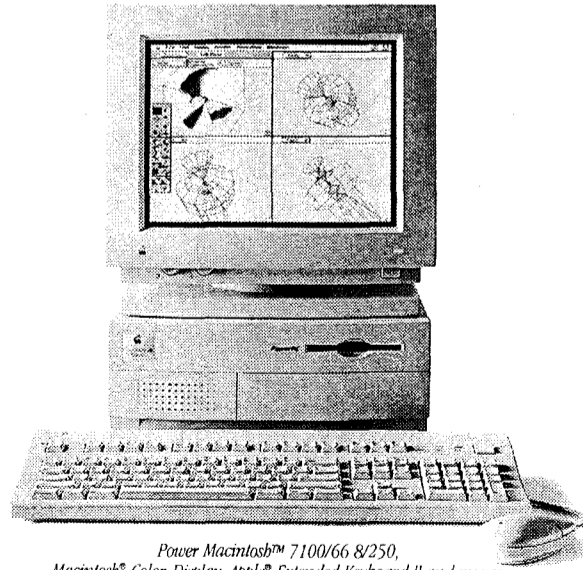
Anyone interested in doing something for the Memorial Day Parade should talk with Angie.

MEETING ADJOURNED

Introducing the fastest ways to get through college.



Power Macintosh™ 6100/60 8/160, Apple® Color Plus 14" Display, Apple Extended Keyboard II and mouse.



Power Macintosh™ 7100/66 8/250, Macintosh® Color Display, Apple® Extended Keyboard II and mouse.

Speed. Power. And more speed. That's what the new Power Macintosh™ is all about. It's a Macintosh® with PowerPC™ technology. Which makes it an incredibly fast personal computer. And the possibilities are endless. Because now you'll have the power you need for high-performance applications

The new Power Macintosh from Apple.

like statistical analysis, multimedia, 3-D modeling and much more. So, what are you waiting for? Visit your Apple Campus Reseller for more information and see for yourself. Now that Power Macintosh is here, college may never be the same.



For further information visit the
Campus Computing Organization
Jorgensen Building 158-79 • 356-4612

CSS Space News

COOL ASTRONOMICAL EVENTS EDITION

by Ross Brown

This edition is to compliment last week's "Cool Space Vehicles Edition," for all you astronomy buffs out there. This week, we will take a look at what's happening in our own solar system.

When Worlds Collide: Jupiter vs. Comet Shoemaker Levy 9

This July 21, a comet will fall into the atmosphere of Jupiter doing about 100,000 miles an hour. This is the first time that humans will see an event that theoretically does not happen very often. Earth gets a lot of meteorites every day but they are most likely dust or grains of sand and vaporize in the upper atmosphere. Objects that are less than 100 meters across vaporize in the atmosphere. Anything larger than that will hit the ground with varying speeds, but always faster than anything terrestrial. A comet that was about 50 meters in diameter disintegrated in the atmosphere above Siberia in 1908 and leveled hundreds of thousands of acres of forest near the Tunguska River Valley.

Comet Shoemaker Levy 9 was discovered last March in an extremely elliptical orbit around Jupiter. Because of this orbit and the pull of the Sun's gravity, the comet's orbit got shifted just enough on its way out so that on its way back in, it will try to rendezvous with the center of Jupiter. Of course, it won't get that far.

Each 1 kilometer wide comet fragment is expected to hit with the force of 500,000 one megaton (moderately large) nuclear bombs. If these cometary fragments were to hit Earth, the entire human civilization would be in a very bad situation (on the order of complete destruction).

The entire comet should pack a wallop one thousand times the size of the individual fragments alone. This totals up to ten thousand times the destructive force of the entire world's nuclear arsenal at the height of the Cold War. I personally find small (one kilometer diameter) Earth crossing asteroids worrisome.

After tracing back from when the comet was discovered, it was found that the comet had passed within the Roche Limit of Jupiter's gravity field in July of 1992. That is, comet Shoemaker Levy 9 was ripped apart by the tidal forces of Jupiter's incredibly strong gravitational pull. The same effect strung out the fragments over 600,000 miles, thus making them easier to see. There are about 21 fragments, each about a kilometer across with a luminous cloud of debris surrounding each piece. The ultimate impact will send huge waves across the face of Jupiter, and may even create a new "Great Red Spot" or even many strung out along that latitude in the southern hemisphere. The mushroom clouds will definitely be visible to the better telescopes, according to some at JPL. According to predictions done on computers at MIT, the waves will take nine days just to propagate across one hemisphere.

Every piece of glass on Earth will be looking at Jupiter this July, including the Hubble Space Telescope and even the *Galileo* and *Voyager* spacecraft. Unfortunately for us here on Earth, the collision will happen on the far side of Jupiter. Of the observation platforms we have available, *Galileo* is the only Terran spacecraft in that part of the solar system. *Voyager* is 3.7 billion miles away and will only look for the flash. *Galileo* on the other hand, will be able to see each fragment plop into the atmo-

SEE SPACE NEWS, PAGE 8

ASCIT View

FROM PAGE 1

tions. Allowing for about a two week gap between approval of the amendment and the election, the initial schedule set the date for consideration of the amendment as Wednesday, April 6, at the weekly BOD meeting. Unfortunately, too many other items on the agenda, including club and House funding policies, the BOC Bylaw Proposal, the ASCIT Formal, and ASCIT Donuts, prevented the BOD from reaching the faculty-student committee issue at the meeting of April 6 as the meeting went on for over five hours. However, the deadline for approving amendments for the election was not until Monday, April 11. It was the consensus that the issue be discussed at the Budget Meeting of April 10, so it could still be considered and approved, if desired, in time for the election. It was made the first priority on the agenda, and after discussing the issue in depth the BOD approved the amendment (5-1-1). The Primary Reasons Behind the Decision to Approve the Amendment

In the efforts to reevaluate ASCIT, the faculty-student committees came up. These committees are an essential link between students and faculty. In those committees, progress is made on important topics such as the core curriculum (the Academic Policies Committee worked on this issue over the past year). They have, in some respects, been an untapped resource; the student members are appointed by the IHC and left to drift. The IHC, because it does not deal with many of the issues which come up in these committees, has no reason to maintain contact with the student representatives. ASCIT, on the other hand, deals with many of the issues on a daily basis. The Director for Academic Affairs works with the administration on academic and curriculum policy issues. The President and Vice President of ASCIT attend meetings of the Faculty Board as official representatives of the students; they hear and participate in debates on issues that come out of the faculty-student committees.

A closer link between ASCIT and the student members on the committees will mean greater awareness—for both parties—of the important issues. A closer link will make student government more effective. To improve communication, the Director for Academic Affairs has already suggested that some committee members serve on the ASCIT Educational Policies Committee as liaisons between their committees and ASCIT. By appointing student members to the Faculty Committees itself, the BOD can emphasize to the

applicants the time commitments required and the responsibilities of the job, including keeping in contact with ASCIT. In general, it is in the interview and appointment that the exact duties of the job are outlined and agreed to. Under IHC appointment, there is a general atmosphere of detachment from ASCIT; the resulting lack of communication and interaction between ASCIT and the committees is detrimental to our student government.

Recently, there has also been a movement to more clearly define the exact separation of duties between ASCIT and the IHC. Based on the above arguments and by simple examination of the duties of each Faculty-Student Committee, ASCIT has proper jurisdiction over the appointment of student members to Faculty Committees. This is not an issue for the House system; this is an issue for the student body—independent of House affiliation.

Reasons Given by the IHC to Keep the Appointments and the Opposing Viewpoints, Both Weighed by the BOD in its Decision

The IHC took the opportunity to share their ideas (either directly or through the IHC Chairman) on the issue with the BOD, or members of the BOD, on the following occasions:

- To the ASCIT President and Secretary at the IHC Meeting of March 7, 1994;
- Through the IHC Chairman at the BOD Meeting of March 28, 1994;
- To the ASCIT Secretary at the IHC Meeting of April 4, 1994;
- Through the IHC Chairman at the BOD Budget Meeting of April 10, 1994.

Several reasons to keep the appointments under the IHC were given at each of these meetings. Primarily, they focus on the relative qualifications of the IHC and BOD to effectively interview applicants and make appointments. Their views were considered in making the decision, as presented below.

The position of the IHC is that they are more qualified to make appointments to the committees. The IHC argues that since one of their members theoretically knows each applicant, they can make a better decision. The problem is that the appointment is *dependent* on that one member. If this member does not know the applicant, e.g. they associate with different people in the House or the applicant lives off-campus, then the IHC is no better off than the BOD. If the IHC member who knows the applicant is absent from the meeting—this has been a recurrent problem in recent years—then the IHC is no better off than the BOD. Actually, the IHC is worse off than the BOD because other applicants may have their presidents

present and be given this important advantage. The tug-of-war system where each president stands up for the interests and members of his House, employed so effectively in the IHC on such matters as Rotation and Interhouse Athletics, fails in such cases where the issues have nothing to do with House bias or partiality. There is a general feeling that applicants who do not know anyone on the IHC have very little chance of being appointed simply because of way the IHC operates.

In respect to the IHC on this issue, the BOD has several advantages. First, every Director is aware that he must represent the students equally, independent of House affiliation, club affiliation, academic class affiliation, educational major affiliation, religious affiliation, geographic affiliation, or any other type of affiliation. Why is House affiliation so important in this issue? Like House affiliation, students in the same academic major tend to know each other—it's one of several issues that transcend House boundaries. So why shouldn't a committee made up of one representative from each major be charged with the appointment? If, say, the IHC is made up of primarily one major so that most IHC members know the applicants from that major, then—using the IHC's own arguments—are they qualified to make the appointments? Under the IHC's argument, they would have an unequal bias, so they wouldn't be the appropriate body to make the appointment.

Perhaps, instead of having one member from each affiliation (whether House, major, class, club, etc.) on the body which makes the appointments, it is better to have each member elected by the entire student body. Members elected in this manner can theoretically remove themselves from any affiliation and approach the issue impartially—with the interests of the entire student body in mind—not just the interest of their House, class, club, or major. Of course, in reality, there may be some unintentional bias, but this can be compensated for in several ways. As in the case of the ASCIT Appointed Offices, the Board of Directors based its decision on interviews and the questionnaire. This questionnaire allows every applicant to present information relevant to the appointment, and more information if he or she so chooses. The BOD just finished appointing the ASCIT Offices of Election Chairman, Movies Chairman, Publications Officers at the meeting of April 13, and the consensus was that, despite the make-up of the BOD, the Directors were able to make the best selections in an impartial manner.

Situation

FROM PAGE 1

Section 2. The Interhouse Committee may act as the nominating committee for the undergraduate members of faculty committees.

All recommendations made by the Interhouse Committee by the twenty-first day before the end of each academic year shall be approved by the Board of Directors.

Section 3. For those positions for which the Interhouse Committee has not made recommendations by the twenty-first day before the end of the academic year, each applicant shall be

interviewed by [an ASCIT committee including the IHC chair] which shall then make recommendations to the Board of Directors.

Please note that the proposed bylaw change deals only with Article

Blacker	6 members	3 alternates
Dabney	1 member	2 alternates
Fleming	4 members	2 alternates
Lloyd	1 member	1 alternate
Page	9 members	2 alternates
Ricketts	5 members	2 alternates
Ruddock	5 members	6 alternates
North Houses	15 members	9 alternates
South Houses	16 members	9 alternates

All information is taken from the 1993-94 little t.

BIG CALTECH DISCOUNTS

THEATRE SANS FIL
The Hobbit

Fri., April 22, 1994 / 8 p.m.

Beckman Auditorium

• Caltech Students: \$7.50

• Caltech Faculty & Staff: \$13.75 - 12.50 - 11.25

THEATREWORKS/USA

CHARLOTTE'S WEB

Sat., April 23, 1994 / 2 p.m.

Beckman Auditorium

• \$8.50 Adults; \$4.50 Children



Armchair Adventures

Travel Film

narrated by Sherilyn Menten



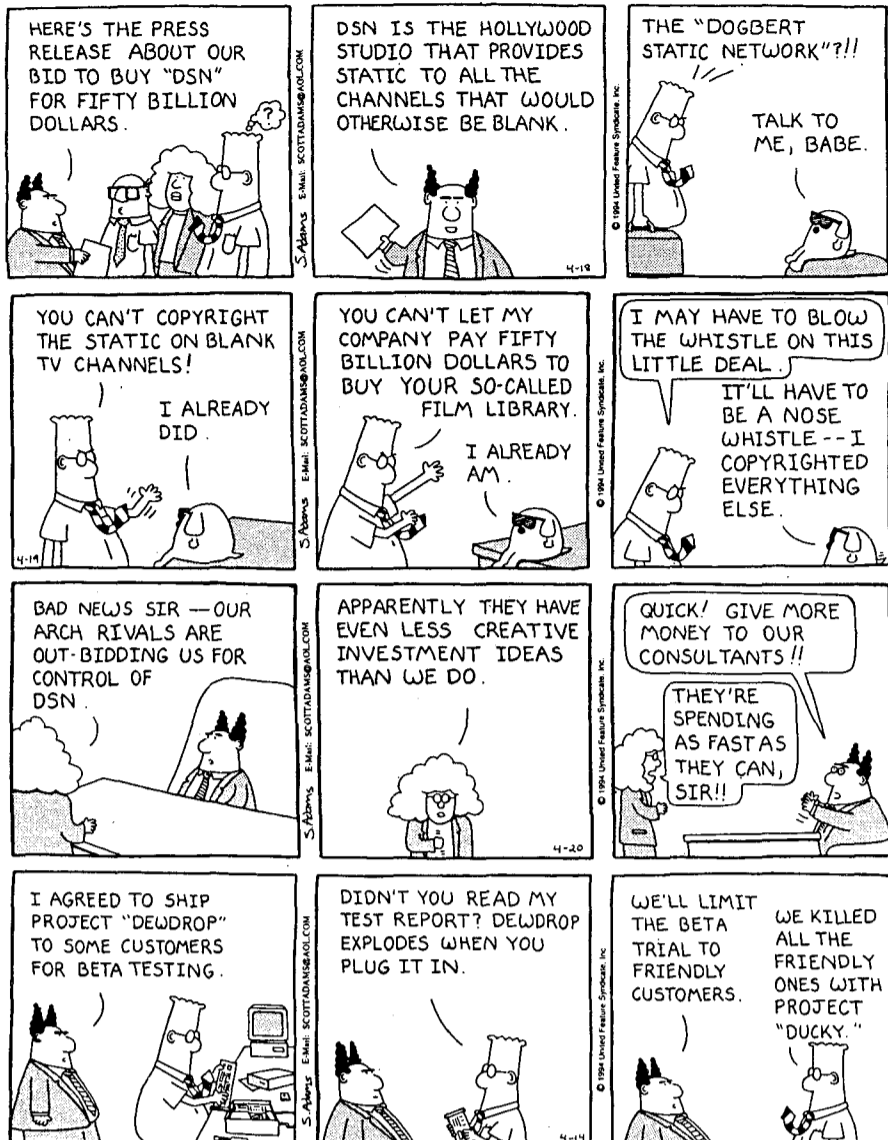
Costa Rica

Fri., May 6, 1994 / 8 p.m.

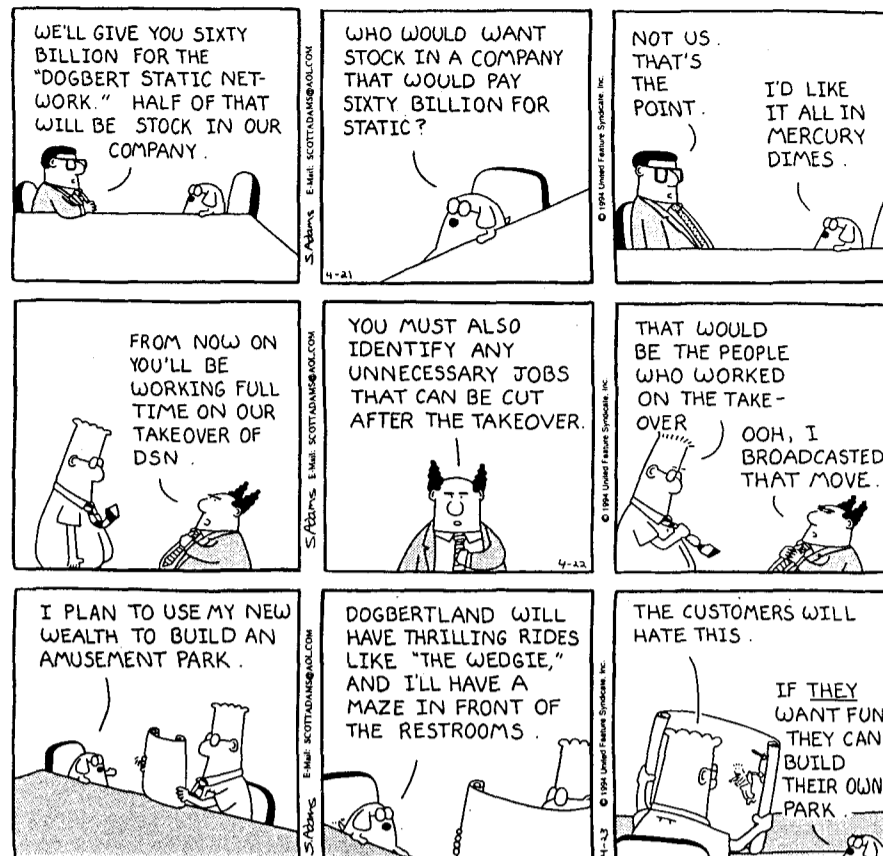
Beckman Auditorium • \$8.00 - \$6.50

Visit the Caltech Ticket Office Today!

CALTECH public events 1993-94 SEASON

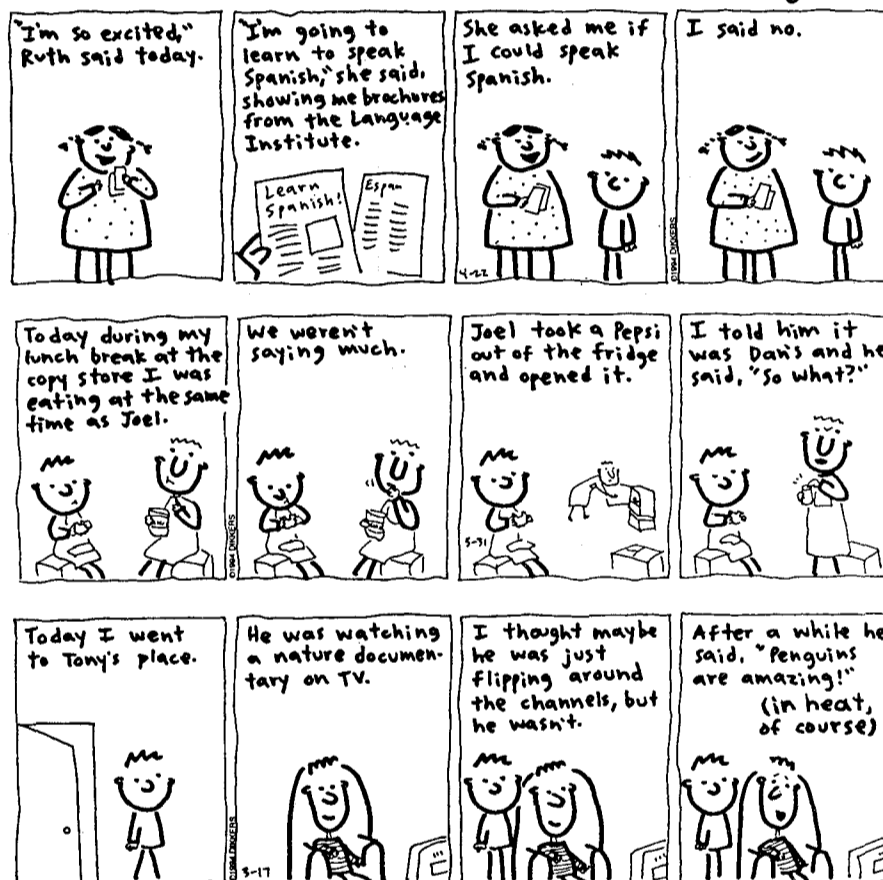


DILBERT® by Scott Adams



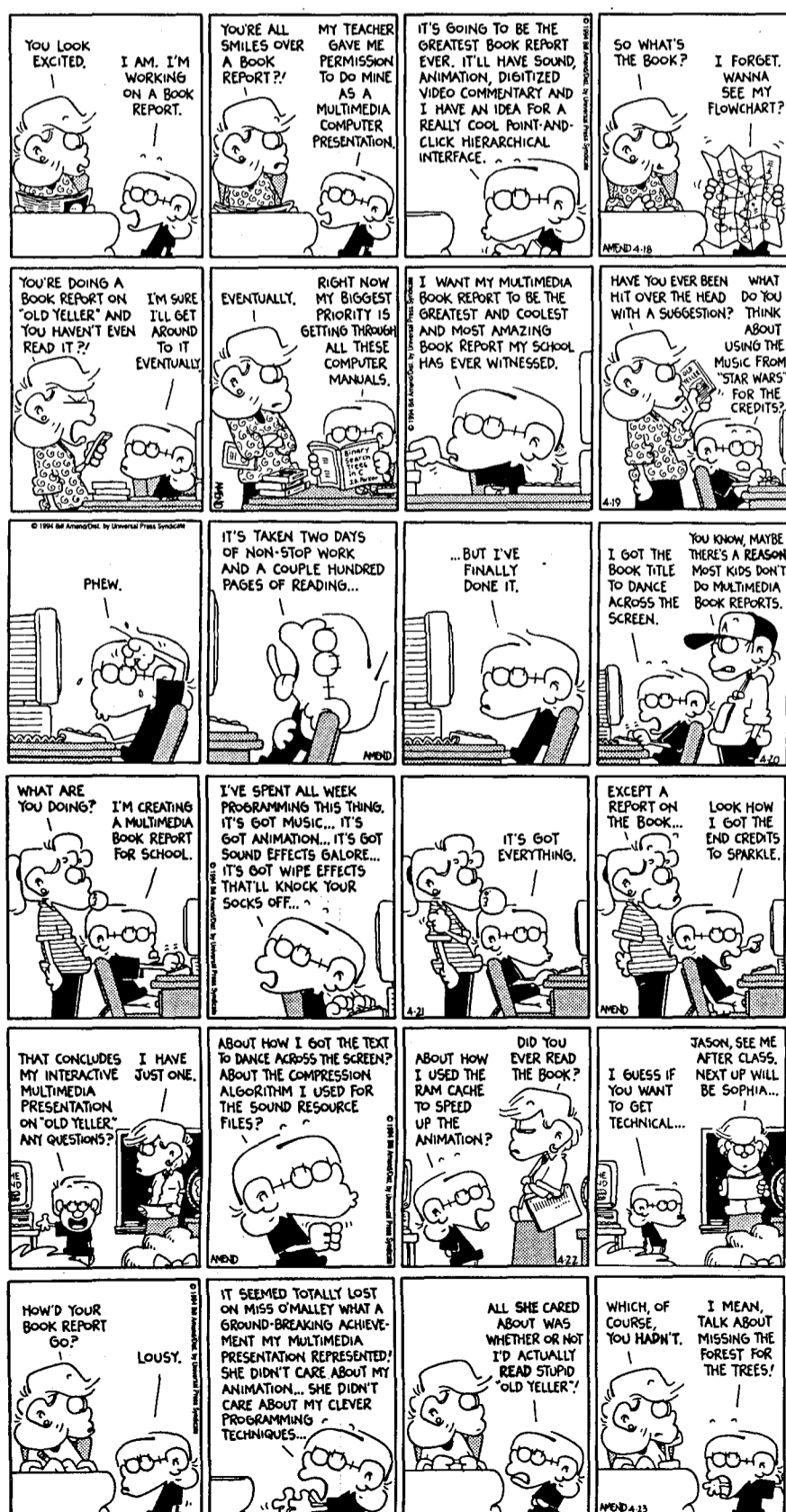
Jim's Journal

by Jim



FoxTrot

by Bill Amend



Acura of Pasadena

Attention Graduates!



1994 INTEGRA SPORTS COUPE GS-R

Reward Yourself!!

Let us know that you're a Caltech student for remarkable savings on all our new and used vehicles!

Contact John Zachman at
Acura of Pasadena
 1285 E. Colorado Blvd. Pasadena 91106
 818-792-7979

Entrepreneurs

FROM PAGE 3

According to a recent survey done by the Alumni Association, there are 425 companies founded by Caltech alumni in the state of California alone. This fact demonstrates that, in addition to the usual run of activities after leaving Caltech, many Techers dive into the less often considered option of entrepreneurship, taking the route towards being a true pioneer, instead of going into research or industry.

Every company we see today, read about, and buy things from was founded by real people—people who are no different from you and me, except for the fact that they took the risks of doing something new in hopes of reaping the potential fruits of their effort and originality. Yes, you too, in full concord with the American spirit of free enterprise, can become a successful entrepreneur. Interested yet? Tired of the “infomercial” sales pitch? Just keep reading...

Among our goals are introducing the general Caltech population to entrepreneurship; learning from the experiences of invited speakers and fellow club members; and learning about the skills and knowledge of legal issues required of entrepreneurs. Generally, if it has to do with entrepreneurship, we want to be in on it, doing it, learning about it, and talking about it.

Come to the first meeting of the new club on Thursday, April 28, at 8:35 PM, upstairs in Winnett Club Room 1; RSVP if you can. Refreshments will be served. In the weeks

IHC View

FROM PAGE 1

from a pool of candidates. It is not uncommon for ASCIT BOD members to run unopposed. Which of these better represents the students?

In their arguments ASCIT will bring up points that are grounded in good intentions, but in fact both ASCIT and the IHC have good intentions. Both the IHC and ASCIT want to appoint the most appropriate students to these committees. When looking at ASCIT's arguments, which of the arguments apply to the IHC and which apply to

both the IHC and ASCIT? Also remember that the proposal does not ask which group can better communicate with members of the committees, but who can better appoint them. If you feel that more communication and feedback is needed with undergraduate members of Student Faculty Committees, this proposal will not address your concerns.

This issue is important to the IHC because we want the best representation of the student body to the faculty. So we encourage all of you to talk to both the members of the IHC and the ASCIT BOD so that you may make a fully informed decision on Monday.

Sincerely,

Kevin Boyce, Ricketts President
Mike DeBar, Lloyd President
James Honaker, Blacker President
Jim Murdoch, Dabney President
Mikey Ng, Page President
Dennis Ugolini, Ruddock President
John White, Fleming President
Benjamin Smith, IHC Chairman ProTem

following, we'll have our first public event: a big social inviting Alumni Entrepreneurs to mix and chat with all of us. Faculty and students alike are invited. Keep your eyes open for more information as the final date has yet to be determined.

If you are interested in more information about the Entrepreneur Club, please contact Samson Timoner, Acting Secretary by e-mail at samson@ugcs or by phone at x1026.

Come join the club. We'll be happy to have you.

Space News

FROM PAGE 6

sphere and explode. The holes that will be punched in the clouds will rotate into Earth's view a few hours later.

It is also possible that the flashes of light will be so intense that they will be reflected by the Jovian moons in our direction, but it is not likely.

Ice on the Moon?

Some Clementine scientists had been quoted as saying that there has been ice discovered on the moon.

Sperry

FROM PAGE 1

ary 1994 issue of *Humankind Advancing*, which was dedicated to Sperry, “Reflection on the manifestations of conscious awareness in the surgically divided brain led Sperry, in 1965, to publish the first of a remarkable series of philosophical papers.” In these papers, Sperry proposed a new theory of mind that, though greeted with initial skepticism, was destined within ten years to replace behaviorism as the dominant foundational philosophy of behavioral science. It is for this, more than his studies of vision, neuronal growth, or split-brain patients, that Sperry wanted to be remembered.

Besides sharing the Nobel Prize in 1981 with David H. Hubel and Torsten N. Wiesel, Sperry also received the National Medal of Science in 1989 from George Bush, the Wolf Prize in Medicine and the Albert Lasker Medical Research Award in 1979, and the California Scientist of the Year Award in 1972.

In addition to his talents as a researcher, he was “the most artistic person I’ve ever known,” said longtime laboratory assistant Lois

Some of the radar signatures returned from the polar regions of the moon indicate are characteristic of frozen water in the craters. This is very significant for the space development community because water could be broken down for fuel for space craft that lift off from the moon. This would, in effect, make the moon a low gravity refuelling station for future interplanetary missions.

The origin of the ice may be

MacBird in a 1981 interview. “He sculpts phenomenally. [The Sperry's] home is filled with his work.” Sperry was also an avid paleontologist, with an extensive collection of prehistoric mollusks.

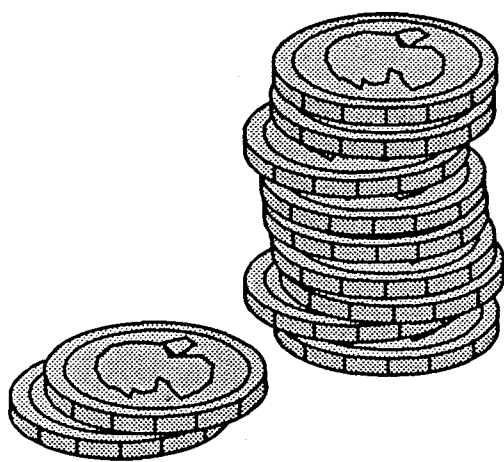
“He was one of the premier experimental neurobiologists of his time,” said Norman Davidson, the Norman Chandler Professor of Chemical Biology, Emeritus, and Executive Office for Biology at Caltech. “Those of us who have known him since those early years will always remember the courage and tenacity with which he continued to carry on his work in later years in spite of a debilitating degenerative disease. It was an inspiration to all who knew him.”

Sperry is survived by his wife of 45 years, Norma Deupree Sperry of Pasadena; his brother, Russell L. Sperry, of Bend, Oregon; his son, Glenn Tad Sperry, of Philadelphia; his daughter, Janeth Hope Sperry, of Cleveland; and two grandchildren.

The family asks that, in lieu of sending flowers, donations be made to the Muscular Dystrophy Association, or to the Children's Lung Fund, Cleveland, Ohio.

comets that smacked into the moon. The ensuing vaporized water then hung around in the moon's ultra-thin atmosphere and condensed near the polar regions, where the sun does not shine.

For more information about CSS and our activities, email us at css@cco.caltech.edu or drop us inter-campus mail at 157-58 in the SAC.

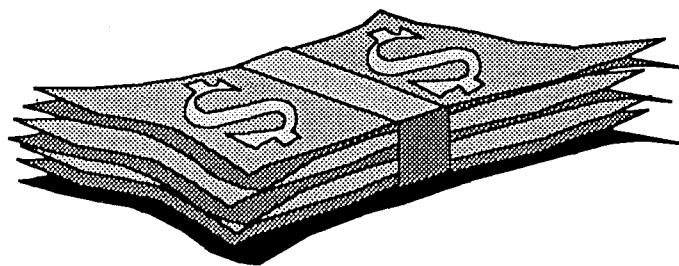


NEED MONEY for COLLEGE?

START YOUR SEARCH WITH COLLEGE COST EXPLORER FUND FINDER

THE FREE, QUICK, EASY WAY TO FIND OUT ABOUT

- COLLEGE COSTS
- SCHOLARSHIPS & LOANS



COME BY THE CAREER DEVELOPMENT CENTER
HOURS: 8 A.M. TO 12 NOON & 1 TO 5 P.M.
08 PARSONS-GATES, x6361

Brundage & Gimbel

from PAGE 1

providing outstanding guidance for the Board of Control.

Mike also served with distinction as Student Body Vice President, suggesting new ways of carrying out proceedings which have had a positive effect on the effectiveness of ASCIT. He spoke at many Caltech functions such as Parents' Day and several Admissions panels, served as a math tutor, and was involved with athletics, music, and service on various committees.

Both Mike's dedication to service and ability to lead make him a valuable member of the Caltech community

dergraduate Engineering Council, the group which sets and administers the curriculum requirements of the Engineering and Applied Sciences major.

Joan Marie has served as Vice President of Blacker House, has been an upper-class counselor at New Student Orientation, and has participated in the Women's Glee Club. She was also chosen by Caltech for a summer internship working in the factory of a Caltech alumnus in Japan. Currently, Joan Marie is serving as Senior Class President.

Prefrosh Weekend Wrap-Up

by Zackary Dov Berger

Prefrosh Weekend, which began April 14, ended on Sunday, April 17 without serious casualties. The event introduced 256 admitted students to Caltech through a series of student panels, social events, and tours. Garrett Choi, Assistant Director of Admissions and one of the weekend's organizers, is pleased with the way this year's weekend turned out. "We've tried over past years to make it as much a weekend for students as possible," said Choi, emphasizing his concern that Caltech be presented responsibly and realistically to the prefrosh. On the other hand, according to Choi, "it's necessary that the students see as much of the campus as possible during their weekend here," so that the Weekend must be somewhat hectic and out of the ordinary. Choi thanks all staff, students, and faculty who helped make the Weekend possible, and invites all those interested in the Weekend and its form to come by Admissions and offer suggestions for change. "It's up to the student hosts," said Choi, "to present a true picture of Caltech."

From the Throop Tech, 75 years ago

The other day an extremely young and inexperienced Freshman was telling us how many things he had to learn how to do. He said that he had to learn how to live, how to concentrate, how to study, how to shine his shoes, how to lace his leggins, how to wear his belt and numerous other things. Still, we can't see where he had any kick coming, for no one asked him to learn how to think. All the foregoing "how to's," except the last, are obviously essential to one's success in life, but the last is absolutely unnecessary. Why should one bother to learn to think? There is nothing to be gained by it, and it's so unnecessary. We can get our religion, our politics, and our style of dress from our parents; our ideas from a book or two; and leave our success or failure in life to Fate. We can go thru college and learn to apply a few ready-made formulas; go out into the world and do the work we are told to do, and do it the way we are told; and then after a "long and successful life," we can die without having had to go to the trouble of thinking once, during our whole mundane existence. So after all, isn't it much better never to think?

No! A thousand times no! Break the bonds at all costs! Wake up! Learn to think and keep on thinking. Never admit that anyone is capable of doing your thinking for you. The whole trouble with the world today is that people have refused to think until it is too late. Would we have had this war if people had thought about it twenty years ago? Would Russia be in chaos today if her rulers had thought of the monster they were breeding? But these are all post mortems. Nevertheless, as sure as we refuse to think about little things, either as a nation or individually, we are going to have post mortems. As long as we refuse to think we are going to let Opportunity knock in vain.

Dr. Francis told us that anyone who thinks in the terms of 1914 is one hundred years behind the times. Let's catch up. Let us not make the mistake of preparing ourselves to face the problems of 1914, we must be prepared to face the problems of 1924. We must be prepared to take the initiative, we must be leaders and not followers. At present the world is facing the greatest crisis of our era. Do you understand that crisis? Do you understand the causes? If not, why?

We must think of these things and be prepared to take the reins of power. We have better opportunities than most, and we should make the most of these opportunities, for as sure as we refuse the leadership we perish.

In Russia, the thinkers refused the leadership, and the haters took the reins of power. Do you want such a think to happen here? If not, think! We may call it Bolshevism if we wish, but it is the Nemesis of an unthinking people.

Games & Puzzles

Ten-digit Numbers

by Wei-Hwa Huang

Quick, what's so special about the number 4,914,991,449? It's got ten digits? How'd you get that so fast? Oh, the title of the article. What's that? It's only composed of 1's, 4's, and 9's? Good, good,...what else? You can't think of anything else? You do have something else? Wow. I'm impressed. I didn't know you'd be able to figure out it was a square number so quickly. So, now we know that 4,914,991,449 is a ten-digit number that's composed of 1's, 4's, and 9's and is square. You're very close, now I want some other property. No, no, nothing like that. Ah! Yes! It's the only ten-digit square composed of 1's, 4's, and 9's. Great!

Now could you tell me what the topic of this week is? Ten-digit numbers, yes, go on. That's it. Ten-digit numbers with unique properties. Oh, you've got one. What is it? 8,888,888,899? Um...it's composed of 8 and 9's and...um...it has eight 8's on the left side! Something more subtle? Gee, I dunno. I give up.

What's this number? Oh, that's very clever. It's the total number of 0's used on the page numbers of a 10,000,000,000-page book. 10 to the 10. I see.

Here are some more problems for you to try:

1. What's so special about 6,117,215,160?
2. How about 8,183,956,153?
3. What's the unique ten-digit number that has its leftmost digit tell the number of zeros it has, the next digit signify the number of ones, etc? For example, there are two 4-digit numbers: 1210 with 1 zero, 2 ones, 1 two, and no threes; and 2020 with 2 zeros, 0 ones, 2 twos, and 0 threes.
4. What's the unique ten-digit number with all ten different digits such that if you take the first n digits as an n-digit number, it's divisible by n? For example, 5 is divisible by 1, 52 is divisible by 2, 528 is divisible by 3, 5284 is divisible by 4, 52840 is divisible by 5, ... up to 10.

Answers next issue.

Do the
Games & Puzzles
Contest!
Win \$10!

Contest Corner

At the time of writing, the contest deadline has not yet passed, so the results will (always) be two weeks after the announcement. This week's \$10 contest is for you to tell me your favorite 10-digit number that has some property that no other 10-digit number has. Send me your number, and an explanation of why it's unique by e-mail only to gp@tech, along with how you may be contacted by "snail" mail and by phone. If you want, you may pose me a puzzle that has your ten-digit number as answer, but if I don't figure out the answer, you become ineligible. Answers will be judged by elegance, terseness, and overall beauty. My decision is final; the winner will win \$10. Open to all members of the Caltech/JPL community, except for Wei-Hwa Huang.

From The California Tech, 25 years ago

Yearbook May Come Out By February Next Year

by Ira Moskatel

Big T Editor John McCord and Business Manager Mike Sperry resigned from their respective positions Monday evening in the conclusion of a long controversy concerning the delinquent compilation and lack of advertising for the Caltech Annual.

At the time of this writing, Chip Smith and Peter Zassenhaus are the probable candidates for the editorial and business positions. Smith had unofficially accepted, pending a study of the situation. Zassenhaus was unavailable for comment. Both have devoted extensive work to those portions of the book now complete.

No figures were available on the exact status of the publication, but it was revealed that two deadlines involving some 74 pages apiece had been missed.

The publishing company, under contract, has the legal right to delay publication one day for every day missed after the deadline. Three months have been accumulated so far.

Smith is now reorganizing the existing staff and negotiating with the publisher for a delayed publishing date. At the Monday evening BOD meeting Director at Large Glen Spain reported that he had been told a February issue could be expected.

Of the advertising necessary, less than 15 per cent of the anticipated total needed has been contracted for. The Big T at present needs at least 1200 dollars in ads for a solvent issue. Along with the advertising faults go a possible lawsuit, perhaps by the publishers, for breach of contract.

Deed Done Dutifully

It is always sad when a tradition dies. Such an event took place at Registration this term. Student body cards were given out on time.

We offer our thanks to Gary Stormo and Glen Spain, Directors-at-Large, for a job well done. They have replaced the tardiness, traditionally associated with the distribution of these cards, with efficiency.

Craig L. Sarazin
Ira D. Moskatel

Volunteers Needed!

The Caltech Women's Center is looking for volunteers to chaperone groups of girls around campus to and from labs on Take Our Daughters to Work Day on Thursday, April 28, 1994. Meals will be provided for. Please call the Women's Center to volunteer and for more information. 395-3221



From Tom Lechner, 0 years ago



SERVING CALTECH
SINCE 1945

Authorized Agents for Airlines,
Hotels and Steamships

H.B. BENNETT
The
Finest in
Professional Travel
Services
(818) 795-0291
(213) 681-7885
CAMPUS EXTENSION
5091

690 E. GREEN ST.
PASADENA, 91101
(between El Molino & Oak Knoll)



IHC minutes

April 18th

by Alison Slempp

Present: Ben Smith [Temporary Chairman], Mike Debar [L], Jim Murdoch [Da], John White [H], Dennis Ugolini [Ru], Mikey Ng [Pa], Kevin Boyce [Ri], James Honaker [Bl], Kim West [DRL], Tom Mannion [Housing Director], Alison Slempp [Temporary Secretary].

Housing

Kim starts off meeting with list of off-campus houses/spaces available for off-campus affiliated housing:

1052 E. Del Mar: 4 doubles (8 spaces)
222 S. Chester: 2 sin., 1 doub. (4 spaces)
230 S. Chester: 2 sin., 1 doub. (4 spaces)
232 S. Chester: 2 doubles (4 spaces)
234 S. Chester: 2 doubles (4 spaces)
236 S. Chester: 2 doubles (4 spaces)
255 S. Hill: 5 sin., 2 doub. (9 spaces)
270 S. Holliston: 2 sin., 2 doub. (6 spaces)
280 S. Holliston: 3 sin., 2 doub. (7 spaces)
290 S. Holliston: 5 singles (5 spaces)
Housing Annex: 5 sin., 2 doub. (9 spaces)

Not on list are 1170 E. Del Mar, 150 S. Chester, Marks, Braun, 180 South Catalina, and 188 South Catalina

Kim states that houses can have all the spaces on the available list for house-affiliated spots. 270 South Holliston, the Housing Annex, and the spaces at 1052 East Del Mar are the only spaces that are currently unaffiliated.

Tom mentions the 255 South Hill (Munth) cannot be promised for a full year of housing. Caltech may at some point take it for offices, so student placed there must be made aware that they may be given notice to leave during the year. Tom guesses that this may not happen for another five years, but he has been told that he cannot promise it starting next year.

Kim projects a large waiting list due to the loss of spaces on Holliston this year.

Ben asks for House preferences. Blacker is the only house that requests Munth (despite possible closure). Ricketts is the only house that will take the Housing Annex. The rest seem split over the Holliston houses. Dennis suggests a division of spaces:

290 S. Holliston + 1 quad (9 spaces)
270 S. Holliston + 1 quad (10 spaces)
1052 E. Del Mar + 3 quads (20 spaces)
280 S. Holliston (7 spaces)

No one complains about a this (or a similar) division.

John requests a week so everyone can take a look at the houses and the quads so they can make an informed decision. Page agrees.

Dennis says, "I will donate organs for 280."

James wants to know how often

this division is done. Ben says that it is done every year.

Tom requests volunteers from the IHC to help him go over and change the lease/housing rules to make them friendlier for everyone. John White agrees to help him.

Kim says that fall lottery information and cards will come out this week. If you want to be guaranteed housing for next fall you need to turn in the card by May 5. Kim also needs the Fall housing rosters by approximately May 12. Presidents should remind the house secretaries to hold room picks and turn the lists in by the deadline. If the secretaries have any questions, they should talk to Kim. The fall housing lottery will be May 18 and May 19. Ben says that typically, the chairman gets the freshman matriculation numbers shortly after May 1, so the IHC can have a meeting to divide the freshman spaces among the houses.

Tom says he has been told of the long waiting list for Fall housing. He is considering setting a contract commitment deadline so people will have to decide up front if they will be in Caltech housing for the Fall. The way he's thinking it will work is that once the deadline has passed, people who have signed the contracts are liable for housing charges. Of course there will be exceptions, such as people who do not register for the Fall term, if you find someone not in campus housing to fill your vacated spot, changes in financial situation that force you to move, etc.

Dates Tom is guessing are June 1, for Fall Housing, December 1, for second term, and March 1 for third term.

The reasoning behind this proposed change in the housing contract policy is that Kim and Tom feel some students may use campus housing as a safety net, which prevents students on the waiting list from being assigned housing until the last possible minute when those holding the spaces finally give them up. Kim and Tom see a problem with having so many students on the waiting list who are forced to worry about where they will live and end up signing leases while at the same time people who cancel their contracts at the last minute leave several vacant spaces on campus that in turn cause the housing rates to go up because Kim and Tom can't fill them.

The point is raised that student will be forced to sign leases in June for housing they won't need until Fall.

Tom says the Housing Office can offer help finding and matching

housing. John says if there were a service that could find housing with a summer delayed lease, then this would probably be okay. Tom says this can definitely be done. Ben suggests that Presidents talk to their houses and get back to Tom on the issue.

Cable

Tom says that he is ready to go with the cable television plan if everyone is willing. He can get us \$400,000 in free equipment (satellite service and all) hooked up to each of the rooms at a cost of \$5-\$10 a student (not sure if this is per month or per term). This can be installed in as little as 35 months.

Laundry Machines

Tom also says that he has not heard any complaints about the proposed changes in the laundry which would involve removing the coin operated machines and providing normal machines at a charge of about \$15 a term. There will be combination locks on the laundry room doors, and arrangements for off-campus students and non-community people are still being considered. Hopefully, all of this can be done before next year.

Food Expenses for IHC Meetings

Kim has agreed to fund the food expenses for IHC meetings for third term.

TFM Contract

Tom says that the food committee chose to renew TFM's contract for the "standard" 2+1 years.

Joint Meeting With IHC

The ASCIT BOD wants to have a joint meeting with the IHC to discuss the issue of who should select people to be on the student-faculty committees. Dave Derkits (ASCIT secretary) told Ben that Tuesday after dinner was a good time for the BOD to meet. The presidents agree that 9:30 p.m. would be acceptable. Ben wants to move the meeting to a larger room in the SAC to accommodate everyone. Ben states this meeting will specifically be about the referendum that the BOD has proposed to take the job of selecting student-faculty committee members away from the IHC and doing it themselves.

Dennis comments that the two issues he sees are: according to the bylaws, it is the IHC's responsibility; and Angie (ASCIT President) represented the BOD without talking to them first.

Prefrosh Weekend

Mike Debar didn't like the Page prefrosh throwing rolls into Lloyd courtyard during dinner.

Mikey Ng says they stopped it as soon as Mike Debar came over to complain.

ADAM VILLANI:
MEDIA GUY

Visit to the Gamble House

I was impressed by the Gamble House when I had read about it in architecture books and was awestruck by its beauty when I saw it in person, and upon stepping inside and taking a tour, I was astonished once again by its intricacy, unique character, and natural tranquillity. The Gamble House is a Craftsman home built in 1908 by the masters of that style, Charles and Henry Greene. It is the best preserved example of their work as well as being considered their masterpiece. The Arts and Crafts Movement emphasized unpainted wood, sprawling floor plans, horizontal lines, and an Oriental influence to create very livable, comfortable, beautiful houses. Every piece of furniture was designed by the architects specifically for the Gamble House, and the house is filled with innovative details that show how it is both a great work of art and an incredibly good design job. The house is now under the care of the USC School of Architecture, and tours are given Thursday through Sunday, starting between noon and 3 p.m.. It is located at 4 Westmoreland Place, just off of Orange Grove Boulevard, north of Walnut.

Pink Floyd, Saturday, April 16th at The Rose Bowl

The problem with reviewing a Pink Floyd show is that they carry such an impressive legacy, and so when they give a very good show like they did last Saturday, instead of a truly incredible show, one cannot help but feel a bit disappointed. That being said, I'll also say that Pink Floyd still has an overwhelming stage show, great musicianship, and the ability to touch a sell-out crowd at the huge Rose Bowl. The first set consisted mostly of newer, post-Roger Waters material, except for two early pieces. The stuff on their latest album is not bad, but suffers from sounding like they spent all of their money and studio time making the tunes sound "polished" rather than experimenting with new sounds and composing gripping works of music. I was glad to see them do "Astronomy Domine," a favorite of mine from their first album back in 1967. The high point of the show for me came at the end of the first set, when during "One of These Days," we were treated to two lurching thirty-foot inflatable hogs that turned the Pink Floyd hallmark of floating pigs on its head by having the beasts instead violently crash to the ground, in perfect accord with the music.

The second set was filled with more popular Floyd songs from *Dark Side of the Moon*, *Wish You Were Here*, and *The Wall*. I got the strange sensation that I was listening to *Dark Side* played on shuffle play, with nearly all the songs off that album being performed, but in no coherent order. A better approach might have been to play "Time" and the entire second side as one suite. I would have also liked to hear a few longer pieces not normally heard on the radio, like "Sheep" or "Echoes". The stage effects were very impressive here, and featured the world's largest disco ball rising above the center of the stadium and opening like a cosmic egg. The sound quality was also quite good. Nevertheless, stadium shows would be better staged in the round, as Yes did on their 1991 tour.

The Scent of Green Papaya

Vietnam's nominee for the Best Foreign-Language Film Oscar was the best of a very good group of nominees. This film about a girl growing up as a servant in a prewar Vietnamese house is possibly the most beautiful, sensual (not sexual) film I've ever seen. Each shot was composed perfectly, often with multiple layers of focus. Much like in Yasujiro Ozu's classic *Tokyo Story*, the screenplay shies away from the traditional narrative with what would normally be considered eventful occurring off-screen. This works with the cinematography to shift the focus of the film away from the story and towards the sensations felt by the characters and the life of a servant. In a Zen sort of way, this movie was about the beauty and simplicity of everyday tasks.

The sights and sounds of the foods being cooked on the screen were so compelling that I could actually smell them. Curiously enough, though, and illustrating the theory that the sense of smell is connected to memory, the only food I could not smell was the one that I had never before smelled: the green papaya itself. Unfortunately, this major work of cinema is no longer playing anywhere in the L.A. area. I would recommend seeing this on video, but would further encourage you to see this in a theater if it ever appears at a revival house, or if the ASCIT movies would ever show art flicks.

Jimmy Hollywood

Writer-director Barry Levinson's (*Rain Man*, *Good Morning Vietnam*) latest movie is about an out-of-work actor (Joe Pesci), who, along with his brain damaged friend (Christian Slater), tries to get acting jobs but ends up becoming a vigilante, cleaning up the streets of Hollywood. Pesci, as Jimmy, increasingly sees his chances for fame as coming from his role playing "Jericho, the Vigilante." It's very interesting to see Jimmy as a person in a constant state of self-delusion, whether it's in viewing himself as a great actor or in thinking of "Jericho" as just a character he made up. Unfortunately, I feel that Levinson could have worked a lot harder on this film, tightening up the script to keep the end from dragging, revealing more about Slater's intriguing character, and showing us more of Jimmy's quest for acting jobs rather than becoming a lighter version of *Taxi Driver*.

There are numerous good things about the movie, though—the near-perfect character-establishing opening scene, the humorous bits in between, the final moments of the story, and the epilogue that plays over the credits. Maybe somebody will do a remake of this movie someday; it had a lot of unfulfilled potential.

Summer Bridge Program
1994

Announcement of openings for the following positions

Counselor

- 1 Head Counselor (undergrad or grad) and
- 3 Counselors (undergrad only)

Teaching Assistant

- 1 Math (undergrad or grad)
- 1 Physics (undergrad or grad)
- 1 Chemistry (undergrad or grad)

Program Dates

Sunday, August 7, 1994 through Saturday, September 17, 1994

Contact

Frank Vargas or Michelle McClenahan
Office for Minority Student Recruitment and Retention
287 South Hill, 2nd Floor (La Casa), 395-6208
call or visit for more information and an application

Application Deadline: May 9, 1994

SEE 18TH, PAGE 11

Paris
\$249*

London \$299*
Amsterdam \$285*
Milan \$380*
Sao Paulo \$375*
Athens \$435*

*Fares are each way from Los Angeles based on a roundtrip purchase. Restrictions apply and taxes not included. Call for other worldwide destinations.

Open Saturdays 10am - 2pm

Council Travel

1093 Brixton Ave., Suite 220
Los Angeles, CA 90024

1-818-905-5777

Eurailpasses issued on-the-spot!

Johnson
FROM PAGE 3

Had the moon not been in one of those sampling frames called a jailbar it would not have been discovered. The infrared mapping spectrometer picked it up as well, but it was considered a fluke until compared with the visible images.

Galileo is due to arrive at Jupiter in December of 1995, and will spend about 23 months in the system as the first artificial satellite of Jupiter. Before arriving at Jupiter, Galileo will launch a probe that will fall into the atmosphere and take invaluable measurements. After it is finished mapping the Jovian satellites and the magnetosphere around Jupiter itself, it will stay in orbit as long as it can before possibly smacking into a moon or falling into the atmosphere of the mother planet.

Galileo is also in a unique position to watch the comet Shoemaker-Levy 9 slam into Jupiter this July. Since Galileo has a 51° viewing angle as opposed to Earth's mere 11°, it will be able to actually watch the event. There are many predictions as to what will happen, but no one really knows enough about the comet itself to say exactly how big an explosion will occur or how it will affect Jupiter's atmosphere.

Dr. Torrence V. Johnson is a project scientist on the Galileo project at JPL as well as a member of the technical staff. Since earning his degree in physics from Washington University in St. Louis, Missouri in 1966 and a doctorate in planetary science from Caltech in 1970, he has held a variety of other positions at Caltech and JPL. Since 1981, he has been a senior research scientist at JPL, as well as being visiting associate in planetary science in 1983 and visiting associate professor of planetary science from 1981 to 1983 at Caltech.

Dr. Johnson has worked on the Cassini Project, the Comet Rendezvous Asteroid Flyby Project, the Lunar Polar Orbiter, and the Voyager Project, as well as Galileo. He has

also worked at the Mount Wilson, Hale, Mauna Kea Infrared Telescope, and Mount Palomar Observatories. He was awarded the Exceptional Service Medal and the Group Achievement Award for the Galileo Project. Asteroid 2614 Torrence was named for him in recognition of his contributions to asteroid science.

18th IHC Minutes

FROM PAGE 10

Scurve Radio

Kevin says that while he was gone someone put sign-ups up for Scurve Radio, but it specifically stated that you did not have to be a member of Ricketts to sign up. Dennis said that it was also announced in Ruddock.

Discobolus

Page beat Ricketts in softball. Lloyd will challenge Page this week. Dean's Frosh Camp UCCs: Proposals are due today, April 18.

Ben wants presidents to encourage people to apply if they want to go and were not selected to go for their house.

Deans will meet next Monday

for lunch to decide on the Dean's UCCs. There are seven UCCs, three of which have to be transfer students. There are also other spots to fill, including audio-visual, kitchen/dish-washer coordinator, photographer, etc. If people would like to do these things, they should specify it on their application to the Dean.

Meeting Adjourned

PASADENA COMPUTER

1756 E. Colorado Bl., Pasadena, CA. 91106 T: (818) 568-1088 F: (818) 568-9132
11841 Wilshire BL., Los Angeles, CA. 90025 T: (310) 575-4028 F: (310) 575-3831

Since 1988

Canon

486 VESA LB

- Pentium overdrive ready
- 2 VESA & 4 ISA slots open
- 4MB ram up to 68MB
- 340MB IDE hard disk
- 3 1/2" & 5 1/4" floppy drive
- Canon 14" SVGA monitor (.28)
- 9600 fax/2400 modem
- VESA accelerator SVGA W/1MB
- 2 serial, 1 parallel
- Canon 101 keyboard
- Logitech mouse, Canon mouse pad
- Energy star compliant (EPA)
- Free software pre-installed (w/manuals)
- Microsoft DOS 6.2 (Value \$55)
- Microsoft Windows V3.1 (Value \$75)
- Microsoft Works for Windows (Value \$155)

One Year On-Site Warranty
486SX-33MHz \$1490
486DX2-50MHz \$1695
486DX2-66MHz \$1850

C:M

486 VESA LB

- Pentium overdrive ready (P24)
- 256K cache
- 4MB ram up to 32MB
- 250MB IDE hard disk
- 3 1/2" & 5 1/4" floppy drive
- 14" SVGA full screen (.28) NI
- VESA accelerator SVGA W/1MB
- 2 serial, 1 parallel
- VESA dual IDE FD/HD controller
- 101 keyboard
- 3 button mouse

One Year Parts & Labor
Warranty

486DX-33MHz \$1199
486DX-50MHz \$1355
486DX2-66MHz \$1399

COMPAQ

ProLinea MT

- Intel inside
- 4MB ram up to 32MB
- 270MB IDE hard disk
- 3 1/2" 1.44MB floppy drive
- VESA accelerator SVGA W/1MB
- 2 serial, 1 parallel
- IDE FD/HD controller
- Compaq 101 keyboard
- Compaq mouse

Three Year Warranty
One Year On-Site Service

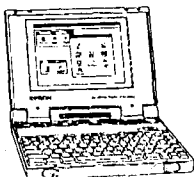
486 / 33s \$1425

All the computers & notebooks, printers are cash discount only.

EPSON

ActionNote. 4SLC/33

- 486SLC-33MHz
- 4MB ram up to 8MB
- 170MB IDE hard disk
- 1.44MB Floppy drive
- 9600 Fax/2400 modem
- Carrying case
- Logitech trackball
- Microsoft DOS 6.0
- Microsoft Windows 3.1
- Win fax lite



One Year On-Side Service

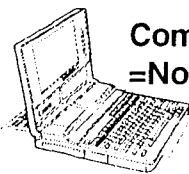
Special \$1495

486SLC2-50/180/fax \$1750
Color 486SLC2-50/180/fax \$2065
SubNotebook 4/120 \$1395
486DX-33MHz /170HD \$1995
Color DX-33 4/260 \$2650

Canon

NoteJet 486

Computer+Printer
=Notejet (2 in 1)



- 486SX-25MHz
- 4MB ram up to 12MB
- PCMCIA II slot
- 80MB IDE hard disk (135MB, 185MB option)
- 1.44MB Floppy drive
- Built-in Bubblejet printer
- 360 dpi
- Canon hand held trackball
- Microsoft DOS 6.0
- Microsoft Windows 3.1

One Year Road-Side Warranty

80MB HD \$2195
135MB HD \$2425
185MB HD \$2595

MITAC

- 486SX-25MHz (Intel inside)
- 4MB ram up to 18MB
- 120MB IDE hard disk
- 1.44MB Floppy drive
- Built-in trackball mouse
- System Preloaded
- Microsoft DOS 6.0
- Microsoft Windows 3.1

\$1299

Color Notebook \$1870

SubNotebook

- Only 4 Lbs
- 486SX-25MHz (Intel inside)
- 4MB ram up to 20MB
- Removable 120MB IDE hard disk
- 1.44MB Floppy drive
- PCMCIA II & III
- Built-in trackball mouse
- System Preloaded
- Microsoft DOS 6.0
- Microsoft Windows 3.1

\$1460

School PO# Welcome

90 days same as cash leasing program available

CLASSIFIED ADS

SUMMER EMPLOYMENT—

SUMMER RESEARCH ASSISTANT

The Solar Astronomy Department has an opening for a summer undergraduate research assistant, involving data analysis of solar observations. The successful applicant will make optical disk movies from our rich archive of digital data observed at Big Bear Solar Observatory. These movies provide the best opportunities to understand the physics of solar flares, the sunspot structure and the evolution of magnetic fields in active and quiet regions. He or she will choose the best digital magnetograms and filtergrams, re-register them and convert them to video movies on the optical disks. He or she will also do similar data analyses by digitizing images from Big Bear raw data stored on video tapes and films. Some physics and programming knowledge will be useful. The job site will be on campus. Applications are available in 264 West Bridge, or can be obtained by calling x4011.

RATES \$4.00 for first 30 words; . . . 10¢ for each additional word. Send written ad with payment to 40-58. Deadline is 6 p.m., Monday before issue. No charge for on-campus lost & found.

This week special



Authorized
Dealer

Powerbook

165 4/80 \$1625
180 4/80 \$2050
180C 4/80 \$2395
145b 4/80 \$1350
145b 4/120 \$1550
Duo 230 4/120 \$1475
Duo 270 4/240 \$2850

Mac Quadra

605 8/160 \$1215
610 8/160 \$1350
610 8/230 \$1695
650 8/230 \$2175
660A V 8/230 \$2095
800 8/230 \$2450

C:M

386DX-40MHz

- 128K cache
- 4MB ram up to 32MB
- 250MB IDE hard disk
- 3 1/2" & 5 1/4" floppy drive
- 14" SVGA 1024 monitor(.28)
- 16 bit SVGA W/1MB
- 2 serial, 1 parallel
- Dual IDE FD/HD controller
- 101 keyboard
- 3 button mouse

One Year Parts & Labor
Warranty

\$895

Canon Notebook

- New Intel enhanced 486SX-25MHz
- 4MB ram up to 12MB
- VGA accelerator video card (3.8 Winmarks)
- 120MB IDE hard disk
- 1.44MB Floppy drive
- 9600 Fax/2400 modem
- Built-in trackball (Middle)
- Battery hours: 2.5 to 5 hours
- 110-240 automatic
- 5.9 lbs
- Microsoft DOS 6.0
- Microsoft Windows 3.1
- Microsoft Works V2.0
- MicroFax by Phoenix

\$1495

Bondwell
Notebook

- 486SLC-33MHz
- 4MB ram up to 12MB
- 120MB IDE hard disk
- 1.44MB Floppy drive
- 9600 Fax/2400 modem
- Battery hours: 4 hours
- 4.7 lbs
- Carrying case
- MS Dos 6.0

\$1295

New Announcements Denoted by ✓

Notices

Earn \$50. The SURF Annual T-Shirt Design Contest is underway. Submit your design (a sketch will do) to the SURF Office, room 137 Beckman Institute, by April 22. The winner will receive a prize of \$50. For further information, call x2885.

✓The Foundation for Student Communication at Princeton University Business Tomorrow Programs CONFERENCE - November 17-19, 1994

✓If you are a current sophomore or junior and will be a student in the fall, contact the Deans' Office, 102 Parsons-Gates Bldg., if you are interested in attending the 19th International Conference: Corporate and University Relations, November 17-19, 1994 in New York City. The Deans' can nominate up to twenty students to participate in this conference. They are looking for articulate leaders who are willing, and capable of debating top corporate leaders. Diversity in academic interests and activities is encouraged. The Foundation covers transportation, meals, and lodging expenses. The Deadline is Monday, April 25, 1994 to sign up in the Deans' Office.

The Housing Office will be hosting an Open House on Friday, April 22 between 1:30 p.m. and 4:30 p.m. Refreshments will be served. Come and meet the staff of the Housing Office and to find out more about what the Housing Office can do for you! If you have any questions about the ad, please contact Biff Yamazaki at x6174. Thank you.

Fellowship Meetings

Summer Fellowship Mailing. To sign-up to receive fellowship information over the summer current juniors and graduating seniors should come by the fellowship office before the end of this term. Please read through the fellowship guide that you will soon receive in campus mail as you will be asked to indicate which fellowship you wish to receive information on. Call Lauren Stolper at extension 2150 if you have any questions.

Coming Events

✓TACIT presents
"The Watched Pot"
An Edwardian Romantic Comedy
by H.H. Munro (Saki) and Charles Maude
Directed by Todd Brun
April 22, 23, 29, 30 at 8 P.M.
April 24, May 1 at 2 P.M.
in Dabney Lounge.
Tickets are \$7, \$5 for Caltech students.

✓stirling will give a Y Noontime Concert live on the Olive Walk on April 22, 1994. Come and Listen!

✓On Friday May 6th, Dr. Murray Gell-Mann will sign his new book, *The Quark & the Jaguar*, from 12:30 to 1:30 at the Atheneum.

✓Jonathan Weiner will sign his new book, *The Beak of the Finch*, from 12:00 until 1:00 at the Caltech Bookstore, on Tuesday, May 24th.

Coleman Chamber Ensemble Competition Winners Concert. Ramo Auditorium, near Chester Avenue south of Del Mar Boulevard, in the Center of the Caltech campus, Pasadena. 3:30 p.m. Winners of the 48th annual Coleman Chamber Ensemble Competition will perform. Admission: \$10, students \$5. Info: (800) 423-8849 or (818) 395-4652. Individuals with a disability: (818) 395-3700 (TDD) or (818) 395-4688 (Voice) weekdays 9 a.m. to 4 p.m. Sunday May 1, 1994.

Club Meetings

✓The Caltech ENTREPRENEUR Club will have an organizational meeting on Thursday, April 28 in Club Room 1 in Winnett. We will introduce our club and talk about our 2 week history. We will finalize the constitution and elect officers. Lastly, we will discuss our first social and open up the floor to any new ideas from members. The Entrepreneur Club is open to all members of the Caltech Community (Grads, Undergrads, Faculty, etc.). If you are interested or would like more info, please e-mail Samson Timoner at samson@uces, or call x1026.

Caltech SEDS meets every Sunday evening at 9 P.M. in 107 Downs to discuss and plan for its \$4 million satellite proposal. Help is needed from undergraduate and graduate students, and advising is needed from research fellows, faculty and staff. Experience with space hardware or with the specific experimental sub-systems (gamma-ray astrophysics and atmospheric chemistry) is not necessary. All members of the Caltech/JPL community are welcome. Contact Ben McCall at x2902 or bjmcall@cco.

Lectures and Seminars

✓The Caltech Chapter of the National Society of Black Engineers, in conjunction with the Multicultural Task Force, presents a lecture by Dr. Michael Eric Dyson, Professor of American Civilization and Afric-

Events and Notices

American Studies at Brown University, reflecting on "The Crisis in Contemporary Black Urban Culture." TODAY, April 22, 1994 at 8 P.M., Beckman Institute Auditorium, Caltech.

Genetic Testing For Breast Cancer: Women's Knowledge, Medicine's Hope.—This Science, Ethics, and Public Policy seminar by Dr. Nancy Press, Assistant Professor in the Department of Psychiatry and Biobehavioral Sciences at UCLA, will be given in the Judy Library. Thursday May 5, 1994 at 4 p.m. Refreshments will be served.

William Bennett Munro Memorial Seminar—Dr Michael Kammen The Times-Mirror Professor of American Studies, The Huntington Library, The Newton C. Farr Professor of American History, Cornell University. Transformations of American Culture, 1920-1960: The Critics' Perspective. Judy Library, BLH, Caltech. Tuesday 26 April 1994. 4 pm. Open to the community, refreshments will be served.

Fellowships, Internships and Competitions

✓There will be an Intercollegiate Mountain Bike Race on April 30th in Riverside. All students can participate. Races range from 4 to 16 miles. There is also a downhill event. For more info, contact Michael Kantner at x4882 or cycling@cco.

The Literature Faculty announces the 48th Annual Mary A. Earl McKinney Competition. The prize is awarded each year for excellence in writing. Only full time students officially registered at Caltech as undergrads are eligible. All submissions to the three categories (poetry, prose fiction, and non-fiction essays) must be typewritten and double-spaced. A prize of \$300 will be awarded in each category. All work must be submitted to Prof. Jenijoy La Belle, Division of the Humanities and Social Sciences, 101-40, by no later than May 5, 1994. No entries will be returned. Winners will be announced the last week of May. For more information, contact Dr. La Belle, x3605, or Barbara DiPalma, x3609.

Math Awards Offered—The E.T. Bell Undergraduate Mathematics Research Prize: \$500 will be awarded for the best original mathematics paper written by a Caltech junior or senior. Nomination/mentorship by a mathematics faculty member required. The Morgan Ward Competition: Any Caltech freshman or sophomore may enter by submitting a mathematical problem and solution or contribution toward a solution. Entirely judged on the nature of the problem and the originality and elegance of the solution. All entries are due in the math office, 253

Sloan, by April 27. Winner to be announced at the Math Awards Banquet, May 16.

✓Teaching assistantships for the Young Engineering and Science Scholars Program (Y.E.S.S.) are available for Summer '94 in the following areas: physics, biology, geology, and computer science/logic skills. Y.E.S.S. is a five-week residential program that exposes 40 high school students to the joys of intensive scientific investigation. The program runs from July 5th to August 5th. Applications are available in the Vice President for Student Affairs Office and are due on Friday, May 6th. Contact Athena, x6321, for more information.

✓The Financial Aid Office has applications and/or information on the following and additional scholarships. All qualified students are encouraged to apply. Our office is located at 515 S. Wilson, second floor.

✓The Asian Pacific Women's Network, Los Angeles announces its 1994 scholarship program. Four \$1000 scholarships will be awarded to women of Asian or Pacific Island ancestry. Applicants who are attempting to make major life changes by pursuing new careers and recent immigrants who are studying English as a second language are especially encouraged to apply. All eligible applicants must reside in one of the Southern California counties. The application deadline is June 30, 1994.

Jewish Family and Children's Services is accepting applications for student loans, grants, and scholarships of up to \$5000. Jewish students who are residents of San Francisco, the Peninsula, Marin or Sonoma Counties (for scholarships and grants), or residents of the Bay Area (for student loans), and who demonstrate financial need and academic achievement are eligible to apply. To receive an application, call (415) 561-1226 or come to the financial aid office. Applications are accepted throughout the year.

The John Gayles Educational Trust is offering financial assistance to Canadian and American citizens. Selected students will receive up to \$2,500. A minimum GPA of 2.7 is required. Deadlines range from April to November. For an application, send a self-addressed, stamped #10 envelope to: The John Gayles Education Fund, Attention R. James Cogle, Administrator, P.O. Box 4808, 712 Riverside Drive, Fredericton, New Brunswick, Canada E3B 5G4.

Assistant Director of Admission Marcie Whaley has left Caltech with Carole Snow to Illinois Institute of Technology. We will miss her.

Due to technical problems, the article regarding Marcie Whaley, Assistant Director of Admissions, has been moved to next week. The picture is still here, though.

Due to space constraints, the picture of Marcie Whaley, Assistant Director of Admissions accompanying the article, has been moved to last week. The caption is still here, though.

The editors would like to apologize for confusing people last week, this week, and next week regarding the articles/pictures on Marcie Whaley.



PARIAN TRAVEL
Caltech Officially Approved

Most professional, courteous, economical and efficient service for your **official** and **personal** travel needs.

Free service to you. We deliver.

Airlines, Cruises, Tours, Hotels, Car Rentals.
Individual, Commercial, Groups.

(818) 577-8200

468 S. Sierra Madre Blvd., Pasadena

Rag Time
on Green

RESALE CLOTHING
for
WOMEN

1136 E. Green St. • Pasadena
(818) 796-9924

Wed 10-6 • Mon-Tue-Thu-Fri 10-5 • Sat 10-3

Save up to 35%

**BURGER
CONTINENTAL**

Save up to 35%

TO ALL CALTECH STUDENTS, FACULTY AND STAFF:

All the time.
Seven days
a week.

BREAKFAST BUFFET Mon-Sat \$3.95

LUNCH with soft drink **\$4.95**

DINNER with soft drink **\$6.25**

Breast of chicken, seafood, lamb, or the day's special

SPECIALTIES

Shish kebab Shaorma Souvlaki steak
Fresh fish and lamb Baklava
Homemade pizza Gourmet hamburgers

We cater for all occasions

535 S. Lake Ave.
(818) 792-6634

Mondays - Half price margaritas.

Tuesdays - Beer half price.

Wednesdays, Thursdays 3-7 P.M.

**HEAR THE
WEDNESDAY NIGHT
JAZZ BAND**

"God and elementary particles have only relative conditions of state, whereas a surface has an absolute condition of state, namely curvature; thus only a surface can be fundamental existence, being that it is independent from anything else."

THE EXACT NATURE OF THE UNIVERSE & GOD

By Joel WEBB

A Study of Surface Mechanics

Topics include the computer simulation of the nuclear-gravitational force continuum, neutron fine structure, the Contracting-Universe hypothesis, the first events and processes found in nature and luminiferous ether re-visited.

AVAILABLE AT House of Fiction and Ample Non-Fiction
663 E. Colorado Blvd. Pasadena

The
California Tech

Caltech 40-58 SAC
Pasadena, California 91125