

Solar System Newly Found

by Hisaho Sonoda

Two astronomers, Richard J. Terrile of JPL and Bradford A. Smith of the University of Arizona, have photographed evidence indicating a possible solar system around Beta Pictoris, a star 50 light years from Earth.

The photograph shows a circumstellar disk, which is a vast swarm of solid particles, surrounding the star. The disk is the first of its kind to be seen clearly in astronomical photographs.

The brightness of the star seen through the disk indicates that the innermost particles of the disk may have been swept away. This evidence suggests the existence of planets since the formation of planets is known to produce such an effect.

Whether there are actually planets around the star is, however, still undetermined.

The circumstellar disk is believed to be made up of ice, silicates and carbonaceous (organic) compounds. The Earth and other planets of our Solar System are believed to have been formed from these same materials.

The flatness of the disk suggests that it is very young, perhaps only a few hundred million years old. (To compare, our Solar System is 4.5 billion years old). An older disk would be less flat since much of the leftover debris would be ejected into interstellar space.

Beta Pictoris is twice as massive as the Sun and is at least 10 times as luminous. It appears as a faint star in Pictoris, a constellation in the southern skies. From Southern California, Beta Pictoris remains below the horizon—it can only be seen from the extreme southern parts of the U.S.

In April, 1984, the astronomers

ASCIT

Pres., Treas., "Gender" Vote Monday

Elections for President and Treasurer will be held Monday, January 28th. On the same ballot will be the vote on the "Gender" by-laws changes.

Nominations for ASCIT VP, Secretary, IHC Chairman, Director for Academic Affairs, Director for Social Activities, Directors at Large, Activities Chairman, Athletic Manager, BOC Secretary, and *California Tech* Editor open Wednesday, January 30th and close Tuesday, February 5th at 5:00 pm. Nominations should be delivered to the Deans' office addressed to Joy Watanabe, ASCIT Secretary. *Tech* statements will be due at 8:00 pm in the *California Tech* office on February 5th.

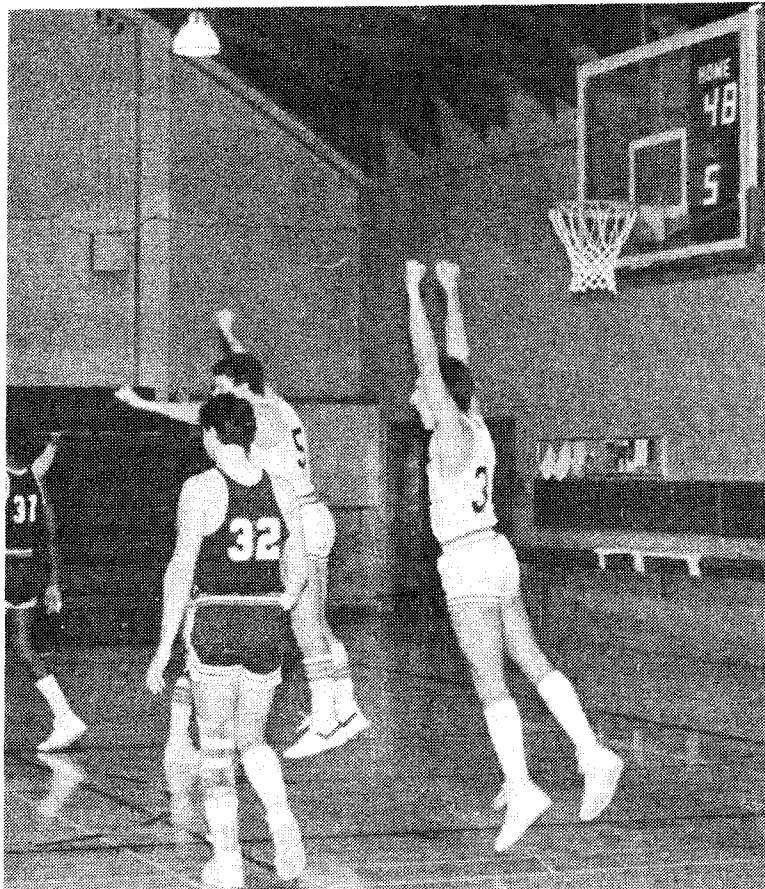
The following is the text of the bylaws as they would be revised by Amendment 1 in Monday's election:

ARTICLE IV

Section 2. Office of the President: The President shall be the official representative of the corporation, shall preside at its meetings and shall be chairman, without vote unless a tie occurs, of the Board of Directors and a member of the Executive Committee. The President shall have ultimate responsibility for proper observance of all responsibilities delegated to members of the Board of Directors and must be either a junior or senior in the fall term immediately following election to the office.

Section 3. Office of the Vice President:

Beaver Basketball Victory!



—photo by Ron Gidseg

Reason for joy: Caltech defeats La Verne in 48-47 cliffhanger

became interested in Beta Pictoris when the IRAS (Infrared Astronomical Satellite) science team stated that this star showed abnormal amounts of infrared radiation, implying the existence of solid material orbiting it.

The photograph was taken at the Las Campanas Observatory near La Serena, Chile using a 100-inch telescope with a CCD (Charge-Coupled Device) electronic camera and a coronagraph. The coronagraph is an optical device which helps detect very faint objects close to brighter ones. The images were then computer-processed.

This observation suggests that

perhaps the majority of stars have debris around them. By observing solar systems in different stages, it may be possible to study the sequence of evolution of these systems.

Terrile and Smith plan to return to Chile next month to continue their work. They hope to study the distribution of material in detail and also to look at other stars to see if it is common to have planets orbiting them.

Terrile hopes to get equipment in orbit to directly detect planets around other stars. He feels that his work is of interest to the public because it questions the uniqueness of our solar system.

Slogans Painted by Vandals in Firestone and Guggenheim

by Tom McKendree

Vandals splattered red ink and spray-painted the basements of the Firestone and Guggenheim buildings late Sunday evening.

The vandals went through every unlocked room and corridor in the two basements, but inflicted only slight damage to Guggenheim's sub-basement. Special attention was paid to electrical equipment, with red ink thrown on to exposed keyboards. None of the equipment, however, was permanently damaged.

"MISFITS" was spray-painted in black over one door, and "DEATH CULT" was found at two other locations, and "DIE KENT JIHNG" was spray-painted over two walls. An Anarchist's

"A" and what appeared to be an Inverted Cross was sashed in red on one wall.

The red dye was water-soluble. It none the less could not be fully washed off the older walls. The dye was also poured on one page of a lab notebook, a row of pictures, and many miscellaneous charts and graphs. Several of these were permanently ruined.

A large red streak down the eastern stairwell of Firestone suggested that the vandals may have entered through Firestone's east-side entrance, which faces the South Student Houses. Similar institute doors have been left accidentally unlocked in the past. It is not clear if the door was locked Sunday evening.

Arroyo Re-Design Shown in Baxter

"Arroyo Seco Release—A Serpentine for Pasadena: a work by Helen Mayer Harrison and Newton Harrison," opens Wednesday, January 30, at Baxter Art Gallery and will continue through Sunday, March 3. The exhibition will present the artists' proposed transformation of Pasadena's Arroyo Seco from its current state as a concrete flood control system to its original natural wash appearance, while still maintaining its flood control capability. The Harrisons have tuned their work to the efforts of several groups already involved in establishing a more natural habitat in the lower Arroyo area.

The artists will present their

project through collages that combine greatly enlarged, hand-tinted aerial photographs and maps with drawings and handwritten text, and a multi-slide presentation of the Arroyo. After tracing the Arroyo's change from its original state as a wash to its present fenced channel, the Harrisons propose capping the channel with concrete and covering it with earth to create a continuous surface throughout the river area while preserving its flood control function. Following this, the artists suggest enlarging the low-flow stream bed already proposed for a short part of the Arroyo to allow it to continue to its full length.

Helen and Newton Harrison are known internationally for creating works of art that comment upon our current ecological predicament. In recent years, they have created a number of projects that explore problems and possibilities of specific American river systems. As part of the educational program scheduled for the exhibition, the Harrisons will give two lectures: Thursday, January 31, "Arroyo Seco Release—A Serpentine for Pasadena"; and Thursday, February 7, on their other projects and their relationship to the Arroyo proposal. Both programs will begin at 8 pm in Baxter Lecture Hall. Admission is free. The gallery will be open following the events.

A catalogue of the exhibition will be available for sale at the gallery.

The Harrison exhibition is made possible by a grant from the Pasadena Art Alliance and is associated with "ArtEx: New Art, New Audience," a series of exhibitions, music, film and video presentations, performances, and other events sponsored by a group of ten art institutions in the Los Angeles area.

Baxter Art Gallery is located in the Baxter Hall of the Humanities and Social Sciences on the Caltech campus. The gallery is open seven days a week, from noon until 5 pm. For further information, call (818) 356-4371.

publications and shall have direct charge of all corporation property.

Section 6. Office of the IHC Chairman: The IHC Chairman shall call and preside over meetings of the Interhouse Committee and shall be responsible for liaison between ASCIT and the various house organizations. The IHC Chairman must be either a junior or senior in the fall term immediately following election to the office.

Section 7. Office of the Director for Academic Affairs: The Director for Academic Affairs shall be chairman of the Educational Policies Committee and be responsible for all other committees formed by the corporation on academic affairs. The Director for Academic Affairs shall be responsible for the production, publication and distribution of the Teaching Quality Feedback Report.

Section 8. Office of the Director for Social Activities: The Director for Social Activities shall be chairman of the Executive Social Committee, shall be responsible for the organization of the corporation's social activities and shall coordinate them with the social activities of the undergraduate houses.

Section 9. Offices of Director at Large: The two Directors at Large shall be responsible for coordinating Red Cross blood drives, and the management, finance, operation and maintenance of the ASCIT bus. In addition, they shall perform other duties as specified by the Board of Directors. At least one of the Directors at Large shall be a freshman at the time of election to the office.

Section 13. Office of the Editor of the *California Tech*: The Editor of the *California Tech* shall be ultimately responsible for the production, publication and distribution of the *California Tech*, to be published at least weekly except during final examination and vacation periods. A group of corporation members may hold this position.

ARTICLE V

Section 1. MEMBERSHIP. The Board of Directors shall consist of the President, Vice President, Secretary, Treasurer, Interhouse Committee Chairman, Director for Academic Affairs, Director for Social Activities and two Directors at Large. No person shall at one time hold more than one office on the Board of Directors.

ARTICLE VI

Section 1. MEMBERSHIP. The Executive Committee shall consist of the President of the corporation, and between four and eight members appointed at the beginning of the third term by the President with the approval of the Board of Directors. The Chairman of the committee shall have ultimate responsibility for the proper observance of all responsibilities delegated to members of the Executive Committee and shall not be a member of the Board of Directors. The Committee shall have the power to appoint a Secretary who shall perform duties determined by the Executive Committee but who shall not necessarily be a member of the Committee.

ARTICLE VII

Section 3. (d) No member of the board shall sit in judgement of his or her own case.

(i) All those appearing before the Board, and the Board itself, are expected to maintain absolute secrecy regarding case meetings of the BOC. Divulgence of any of the proceedings shall be considered a violation of the Honor System. The defendant may discuss the issues involved in his or her own case with others at any time after said case has been completed. However, once the defendant initiates discussion, witnesses in the case are no longer bound to secrecy. If, in a particular case, the Board shall deem it wise to make known the proceedings of

continued on page 4

the gadfly

An examination of student life at Caltech

Election Thoughts

by Lily Wu

The headline in last week's *California Tech* announced, ASCIT elections are coming soon. Elections are exciting because they are high potential events. The potential lies with the field of nominees running, the nature of the issues raised, and of course, the voter's eventual choice. The right outcomes in each of those three areas can lead to great change, wise leadership and exciting new projects. Likewise, all three outcomes may result in mediocrity (as might have been the case with the 1984 presidential elections).

The effect of an important office could be lost when any of the following aspects enter into either the election or nominees: apathy, naivete, lack of choice, lack of experience, lack of integrity, lack of enthusiasm, or lack of substance.

There are many things to look out for and to consider in an election. Potential for greatness is always accompanied by an equal and opposite potential for failure. As with all democratic events, the only trustworthy watchdog against possible failure and disinterest is the voters themselves. Whatever the voter's eventual choice, it is crucial that it be a choice made after serious consideration. No final decision can ever be too bad as long as reasoning and evaluation went into every vote cast.

The Caltech ASCIT election has two added features: the NO vote and write-in choices. Both can be used very effectively and should not be overlooked. The NO vote is a statement against either too few nominees or nominees of poor quality. In national elections, when 50% of the population do not vote, it is hard to tell if they did not vote as a statement against the candidate choices or because they did not care. The NO vote says "we care enough to vote, but dislike the choices."

The NO vote, though, is only a statement and not a tool. Its complement tool is the write-in option. A NO vote, when ideally used, tells the students that another choice is warranted and will have a chance in the run-offs. That is when additional candidates should declare themselves as alternatives and run as write-ins. The potential of both these features should be recognized and utilized more often than it has been in the past.

Another new feature seems to have presented itself recently. In last December's issue, I read about the proposed ASCIT By-law changes. It seemed a valid concern that the former election process did not allow for any interaction between the old and new Board of Directors (BOD).

The solution was an interesting one. The election for the offices of treasurer and president would be held two weeks before the election of the rest of the BOD. The solution raised two questions: why two weeks, and why the treasurer?

A good reason not to have the elections two weeks staggered is that it means a possible 5 elections in the first 6 weeks of this term (including one run-off for each election and the by-laws vote). That is too many times to have to vote in such a short period. If the intent was BOD in-

letters

An Amateur Review

To the Editor:

From last week's *Tech*'s review of TACIT's One-Acts Marathon, by Tom McKendree:

"...If I seem harsh, it is because I hold TACIT to professional standards—boring is no less boring if done by amateurs. The performance is nonetheless entertaining, and well worth the ticket price."

Well, Mr. McKendree, was it *boring* or was it *entertaining*? It is certainly not clear from this summary. Unfortunately, the entire review was just this muddled, with no overall impression to be gained by the reader except that the reviewer was feeling hostile that day.

But I suppose one shouldn't complain. TACIT's last several shows weren't reviewed at all, with the exception of "Brigadoon"—which was reviewed while still in

rehearsal, resulting in an uproar that was reflected in the *Tech*'s "Letters" section for weeks afterwards. Seeing that TACIT is run by and for Caltech students and other members of the Caltech community, one would think that the student newspaper would show an interest in objective, critical coverage of its productions, instead of allowing the weeks of preparation (and expense) to be dismissed in the poorly reasoned, unprofessional fashion of the reviewers of the recent past. To paraphrase Mr. McKendree, sloppy criticism is no less sloppy if done by amateurs.

—Alice Cronin-Golomb

[A factual correction here—the TACIT production immediately preceding the One-Acts Marathon was Thurber's "Thirteen Clocks," which received both substantial coverage and a favorable review (issue of October 26, 1984). Ed]

teraction, then why not elect the new BOD as usual and simply inaugurate them a month late? Then the entire board could benefit from a transition period of a month rather than two weeks.

Secondly, why was the treasurer chosen as the second office for early elections? It seemed a more natural choice would be the secretary. A secretary can benefit from a short training period and is key to the BOD's organization. The secretary is an important enough position that the office holder often becomes president later. Those facts do not hold as well for the treasurer.

Therefore, while the two week staggered election does not adequately allow for a transition, it *does* allow losing candidates in the first round to run for offices in the second round. This may not have been intended, continued on page 6

GSC Studies Grad Living

by George Carman

In response to expressions of concern regarding matters of health care, housing and stipends, the Graduate Student Council has formed a committee to evaluate how each of these influences the quality of graduate student life. One of the first objectives of this committee will be to provide graduate students with a series of reports on the status of health, housing and stipends in the hope of eliciting suggestions as to how these might be improved. The

committee will then pursue these matters with the appropriate Institute administrators and Faculty committees. It is hoped that these discussions will culminate in a conference this spring between the graduate students, the Faculty, and the Institute administration in which existing problems and inequities could be discussed and possible solutions explored. Both Vice-President for Student Affairs J. J. Morgan and Dean of Graduate Studies Arden Albee have expressed interest in such a conference.

The report on the status of health care appears in this issue of the *California Tech*, with the remaining reports on housing and stipends to appear in subsequent issues. Direct your questions and comments to George Carman, GSC Standards of Living Committee, 216-76.

CALTECH WIND ENSEMBLE Concert

Tuesday, January 29
Music by P.D.Q. Bach, J.S. Bach,
Sousa and Percy Granger
Refreshment following concert
Ramo Auditorium
8:15 PM

The Caltech Y Fly-by

Friday... January 25
Noon Concert, "Band Called Sam" at noon on the Quad.

Neil Simon's "Biloxi Blues" if you signed up (and won) pick up your tickets today and go tonight.

Sign up for the Shaper which will be on February 3.

Saturday... January 26
Sailing leaves at 7:30 am, don't forget. No black soled shoes allowed.

Sunday... January 27
LA Arts Festival, the Y will be providing transportation, the exhibit is free. All you need to do is show up at Winnett at noon.

Wednesday... January 30
Noon Update. "Ethical issues for Consultants in dealing with the Third World," Thayer Scudder, Winnett Clubroom 1, at noon, bring a lunch and a friend.

Friday... February 1
Noon concert, to be announced.

Sunday... February 3
The Shaper, Tickets are \$6, the show is at 8:00 pm.

For more information, contact the Caltech Y at 356-6163, or just drop by.

Cinematech

Episode 2 of Flash Gordon

Richard Burton-

Clint Eastwood-

Where Eagles Dare

— Show times at 7:30 and 10:00 —

Saturday Evening in Baxter Lecture Hall
Students, \$1 All Others, \$2

THE ASCIT MOVIE
TONIGHT at 7:30 and 10:00

BILL MURRAY

IN STRIPES

in Baxter Lecture Hall
\$1 ASCIT members \$1.50 all others

THE CALIFORNIA TECH

Volume 86 Number 14
Friday, JANUARY 25, 1985

Published weekly except during examination and vacation periods by the Associated Students of the California Institute of Technology, Inc. The opinions expressed herein are strictly those of the authors and do not necessarily reflect those of the editors.

Letters and announcements are welcome. Included with all contributions should be the author's name and phone number and the intended date of publication. The editors reserve the right to abridge letters, so please keep them concise.

Turn in copy to the *Tech* office mailbox, room 107 Winnett. The deadline for copy is Wednesday evening at dinner time (Tuesday evening for announcements). Late copy may not be printed unless previous arrangements have been made with the editors.

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The offices of the *California Tech* are located in Winnett Center on the Caltech campus.

Editor: Room 107 356-6154
Business Manager: Room 107 356-6154
Production: Room 115 356-6153

The *California Tech*, 107-51
Caltech, Pasadena, CA 91125

Printed by News-Type Service, Glendale, California.

Subscriptions should be directed to the attention of the circulation manager.
\$6.00 per year (three terms)
\$100.00 per life ISSN 0008-1582

Student Health Explained

by George Carman

Most graduate students know that the Caltech Student Health Program consists of two components: (1) services provided by the Young Health Center, and (2) benefits payable under the Student Health Insurance Plan, underwritten by Mutual of Omaha. Unfortunately, many students do not find out what is and is not covered by these benefits until they are faced with unexpected and perhaps unaffordable medical expenses. In the past three years of serving as the Graduate Student Council representative on the Student Health Committee, I have found various instances where our Health Program is lacking, and have accordingly suggested improvements to the Committee. In that time, I have expressed concern over (1) matters of routine operation of the Health Center and Counselling Services, (2) the adequacy of the existing benefits payable under the Student Health Insurance Plan, (3)

the need for dental benefits for graduate students, and (4) the need for maternity benefits for graduate students and their spouses. While the Health Committee chaired by Bruce Cain has succeeded in obtaining maternity and elective abortion coverage for women students, it has not been effective in dealing with the remaining issues.

One difficulty faced by the Student Health Committee is that its members do not have the expertise to evaluate the daily operation with the Health Center and the Counselling Services. In appreciation of this problem, the Health Committee requested in 1981 that a blue ribbon panel of health professionals be invited to evaluate our Health Program. This proposal reached President Goldberger's desk, where it was, according to one source, simply forgotten. Because of limited resources (only three active Faculty members) and an abundance of concerns, the Student Health Committee has not attempted to resurrect this issue.

However, Vice-President for Student Affairs J. J. Morgan has assured me that the services of a health consultant would be made available to the Health Committee if requested. Hopefully, the Health Committee will eventually take advantage of this offer. Also in this regard, I am interested in learning of any problems students may have had obtaining satisfactory health care at the Health Center or from Counselling Services.

Our existing health insurance benefits, as outlined in the pamphlet available at the Young Health Center, have not been updated in ten years despite substantial changes in the cost and nature of health care in that time. For instance, the maximum benefit of \$20,000 and one year's coverage from the date of accident or illness could easily be exceeded. The major medical benefit, which pays 80% of hospital costs up to the maximum benefit, has left the student paying 20% of medical costs which for a given accident or illness have grown at a faster rate

continued on page 6

Ay Prof Mould Receives Prize

by Charles Barrett

At a meeting of the American Astronomical Society in Tucson, Arizona last week, Caltech Associate Professor of Astronomy Jeremy Mould was co-recipient of the Newton Lacy Pierce prize. Sharing the award with Mould is Dr. Marc Aaronson of the Seward Observatory in Tucson.

Begun in 1974, the Pierce prize is awarded for outstanding work by an astronomer or astronomers connected with a North American institute of higher education; additionally, all recipients are to be younger than 36 years of age.

Mould and Aaronson were recognized for their joint work on two topics. Primarily, they determined that the local supercluster, with a mass in the range of 10^{14} to 10^{15} solar masses, exhibits motion relative to a frame of reference external to our galaxy.

The second work cited by the

Pierce prize is a new estimate of the Hubble Constant, the ratio of the speed at which a distant galaxy is receding from our solar system to its distance from the solar system. The Hubble Constant is central to the determination of the age of the universe. Mould and Aaronson place its value in the range of 90 to 95 kilometers per second per megaparsec.

Both Mould and Aaronson, in addition to receiving the Pierce prize, presented papers at last week's AAS meeting. Mould spoke on "The Formation and Evolution of Carbon Stars," and Aaronson discussed "The Distance Scale: Present Status and Future Prospects."

Their work is based on observations in the infrared spectrum using ground-based telescopes in the western U.S. and in Chile at Cerro Tololo and Las Campanas.

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BURGER CONTINENTAL

TO ALL CALTECH STUDENTS AND FACULTY:

Have your BREAKFAST with us 6:30-11:00. Ham, bacon, or sausage, 3 eggs, country potatoes, and zucchini bread for only \$1.99 with Caltech ID, Monday thru Friday.

**SPECIALTIES: SHISH-KABOB, SHAORMA, SOUVLAKI-STEAK
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Faculty, Grad Students, Attend!

Mondays and Tuesdays are Beer Days. Half price on beer.

**B. C.: On Lake Avenue
1/2 Block North of California**



Election Statements

President

Supriya Ghosh

My name is Supriya Ghosh and I am running for ASCIT President. If elected, I plan to improve student life here at Caltech. Over the course of the three years that I have been here, I have noticed an enormous amount of apathy in the student body. As ASCIT President I will actively campaign for more student involvement in social activities and student government. Since we have a very small student body, a lot more opportunities are available for the individual student. As president, I would utilize these opportunities effectively. Let us all try to make this institute one we can be proud of. I sincerely hope that you will vote for me.

Joy Watanabe

As a current member of the ASCIT BOD I am familiar with its ongoing projects. I am running for president so that I can become more involved with these projects. I feel that the purpose of ASCIT is to work towards improving student life, both socially and academically. Towards this end, I would like to concentrate on projects dealing with students' problems and concerns. I would appreciate your support on Monday. Thank you.

Treasurer

David Bruning

It would greatly please me to have the opportunity to serve you in this important position. I feel

that it is very important that the treasurer knows how to keep accurate records. In this area I have had experience, having served as treasurer in a very profitable small company for two years. This gave me the chance to keep all the financial records over that period. As treasurer, I feel that I could keep the necessary records and also perform the normal duties of the treasurer without too much strain on my schedule. I would ask each of you to seriously consider my candidacy for this position.

Everett Howe

I decided to run for ASCIT Treasurer because I found my term as Dabney House Treasurer interesting, and I thought that the switch to ASCIT government might provide more of a challenge. I am responsible, and, as Dabney House isn't broke (yet), I seem to be a reasonable treasurer. Also, I like money.

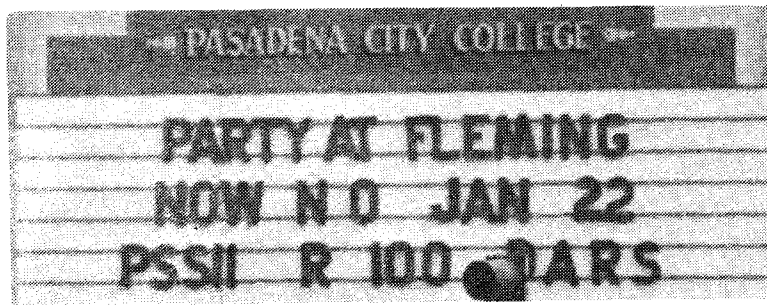
Please give me your vote on election day.

Joe Williams

My name is Joe Williams, and I am running for ASCIT Treasurer. I am familiar with the duties of this office and am aware of its importance.

I have had several years of accounting experience, keeping records for a small corporation. I am certain that I have the competence and dedication to keep ASCIT running smoothly.

Your votes will be greatly appreciated.



—photo by Ron Gidseg

The Inside World

Ruddock: Nobody has to worry anymore now that Graven is protected. Well, almost nobody.

Elections are only a week away. I'm sure those in office now will be happy to be relieved of all the work they have kept putting off. I feel sorry for the new librarian.

There are a lot of presidential candidates this year. It is good to see so much Ruddock House dedication. I love the variety, but it makes the vote decision even more difficult. Good luck to you all.

What's this I hear about a party this weekend? It seems unclear so far. Even more unclear will be the air at the Q.E.D. against Dabney. Have fun, guys.

The Alley War is over, but what a fight it was. The excellent strategies employed led to a grueling stalemate between these alleys.

In the News: Who is San Marino? Nobody. Also, don't miss "Stop Making Sense" now playing at the Rialto.

"Here I am sitting in a tin can,
Far above the world.

Planet Earth is blue,

And there's nothing I can do."

—Andy Campbell

Lloyd: FINANCE: Uncle Joe's rich!

MUSIC: The latest fad in the singing world is the singing of "Shut up" by a pick-up choir at lunch table. Synchronization and spontaneity is the key to the successful performance and appreciation.

CALENDER: Baton party Saturday. And let's all go and meet Johnny!

SPORTS: The party at the La Verne game really paid off. Debby was there, too!

FROM JP: Listen up sportsfans... The "men of moot" earned both valour and points via the eternal hoop—extremely decent of them, I must say. And who could forget the man of the hour, day, and (we hope) year? Ashok Krishnamoorthy, our candidate for the ASCIT presidency—a man who has demonstrated sleep in the pool hall, charm in the rumpus room, and/or can flatten steel buildings with a wave of his hand (pick three). Macho Morthy, we of the house of Lloyd salute thee!!

Gender—Revised ASCIT Text

from page 1

the Board, the Chairman shall be empowered, upon resolution of the Board, to convey such information without disclosing the names or identities of any persons involved.

ARTICLE X

Section 2. On the question of whether or not the officer shall be recalled, an affirmative vote from $\frac{2}{3}$ of the voters shall suffice to remove the officer from that office; otherwise that officer shall continue.

ARTICLE XIV

Section 3. The Business Manager of each publication is responsible for all funds belonging to that publication. The Business Manager may open accounts only with banks previously approved by the Board of Directors, will account for all receipts and expenditures in a manner recommended by the Treasurer and will submit term and annual reports to the Board of Directors on the financial condition of that publication. The Business Manager is the only one empowered to transact business in the name of a publication. All checks must be signed by both the Editor and the Business Manager.

Section 5.

(b) *The Big T.* The Editor will receive

a salary of three hundred dollars (\$300) with a possible bonus of one hundred dollars (\$100). The Editor may appoint a maximum of four Assistant Editors, who will each receive a salary of one hundred dollars (\$100).

(d) *The Teaching Quality Feedback Report.* The Editor will receive a salary of one hundred fifty dollars (\$150) with a possible bonus of one hundred dollars (\$100). The Editor may appoint a maximum of two Assistant Editors, who will each receive a salary of fifty dollars (\$50).

Section 10. The Publications Darkroom Chairman is responsible for maintaining the publications darkroom, authorizing persons to use the facilities, and filing negatives for the use of the publications. The Chairman will receive a salary of one hundred fifty dollars (\$150) for the year's work and will take office at the beginning of the academic year.

RESOLUTION VI

Section 1. At the discretion of the ASCIT President, a President's staff shall be appointed by the Board of Directors upon the recommendation of the President. The purpose of this staff will be to assist the ASCIT President in presidential duties and

to offer a special opportunity for creative work.

RESOLUTION VII

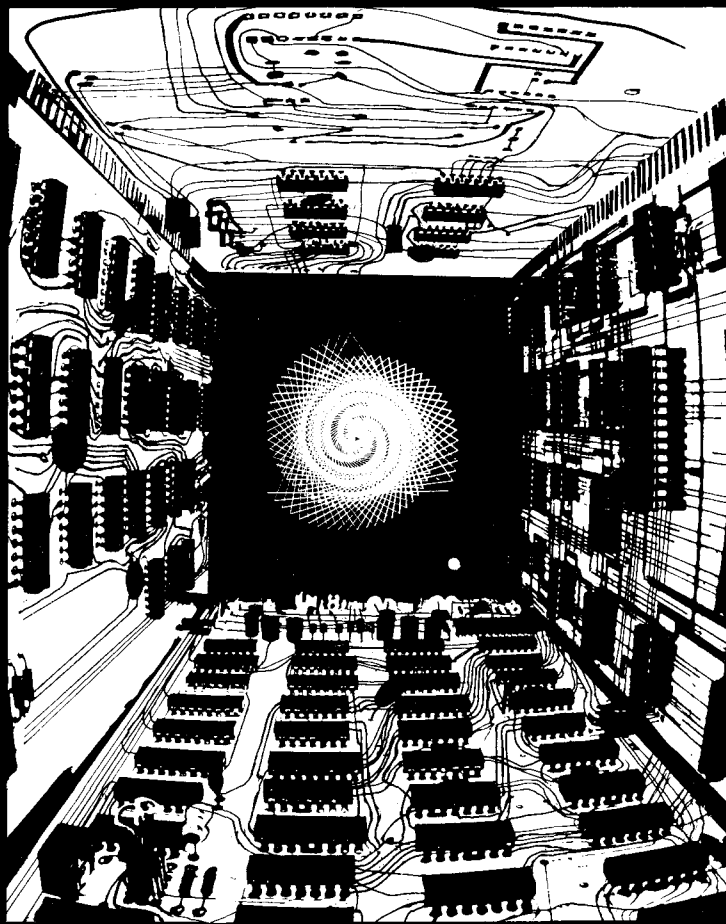
Section 2. FINANCES. The Coffeehouse Manager shall be responsible for all operating funds belonging to the Coffeehouse and shall deposit all operational funds received in said bank as approved by the Board of Directors. The Coffeehouse Manager shall account for all expenditures and receipts in a manner approved by the Treasurer of the corporation and shall submit term and annual reports to the Board of Directors on the financial condition of the Coffeehouse. Upon completion of the fiscal year, all Coffeehouse profits in excess of normal operating costs, with a matching amount from the Board of Directors, will be placed in a special Coffeehouse Reserve Account to be administered jointly by the Board and the Coffeehouse Manager.

RESOLUTION IX

Section 2.

(e) A band member who begins membership as a sophomore and who satisfies the requirement may have the option of receiving a jacket at the end of two years or receiving a blanket at the end of three years.

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entertainment

The Club is Hot

by Nick Smith
The Cotton Club
 Orion Pictures

There are a lot of successful musical comedies, but not many good musical dramas. The problem is that, the more content a movie has, the more the average viewer considers the musical numbers to be a distraction. Most of the really good musicals have had plots that could be summarized in a short paragraph. That doesn't mean that a musical can't have a good plot, only that it probably won't have a very complex one.

The Cotton Club is an attempt at being the exception to a lot of rules. It tries to be a heavily serious gangster movie interspersed with a magnificently staged musical. It is not a comedy-drama mishmash like the late unlamented *Pennies From*

Heaven. It's drama all the way, with the musical numbers acting to illuminate and entertain in the same way that good illustrations enhance a piece of text. The only bad thing is that the viewer may come away wanting either more of the gangster movie or more of the musical numbers. Both are excellent, but sometimes it's as if someone pasted illustrations over part of the text.

For example, how much does the average viewer know about the personality conflicts of bootleggers during the late 1920s and early 1930s? How about you, hmmm? Well, some of the film's most dramatic moments depend upon the viewer having at least a passing acquaintance with the historical figures involved. If you don't, tough luck, because the details aren't available here. If you do

know a little bit about the period, the film will probably strike you as even more impressive because you will be able to spot what's coming, and enjoy the richness of detail in the rendition.

Richard Gere plays a musician who gets dragged kicking and screaming into the violent world surrounding gangster Dutch Schultz. Of course, he falls in love with Dutch's current mistress, played by Diane Lane. Hey, it's a musical, somebody has to fall in love, right? Anyway, their trials and tribulations are plot #1.

Gregory Hines plays an up-and-coming black dancer whose career weaves in and out to form plot #2. Plot #2 is where you will find most of the musical action, although Richard Gere plays a pretty good cornet. (Not dubbed, by the way; it's really him playing.)

Fred Gwynne (yes, Herman Munster has finally made it big)

continued on page 6

Movie Review

Positively Obsessed With Swann in Love

by John Fourkas

Swann in Love
 Orion Pictures

For many people, the name Proust conjures up horrific visions of tedious plots and endless sentences. Some may even be reminded of a certain "Summarize Proust" contest, or maybe something about "Mr. Reagan." But how many of us have actually read Proust? Not I. Thus, when I decided to go see *Swann in Love* (adapted from the first section of Proust's *Swann's Way*), I wondered whether my ignorance of Proust would be an advantage or a disadvantage. In retro-

spect, I think that this lack of knowledge was a slight benefit, as I was not burdened with any expectations (other than those created by reading other reviews) while watching the movie.

Swann in Love surprised me from the first moment, when I found out that the entire movie was in French with subtitles (and good subtitles at that)—something I did not expect from a movie starring Jeremy Irons (*Brideshead Revisited*, *The French Lieutenant's Woman*). Capping off this surprise was the fact that Irons plays an incredibly convincing Frenchman. Apparently the director, Volker Schlöndorff (*The Tin Drum*), was not able to find a French actor he was willing to cast. He finally asked Irons (who had never read Proust) to look over the script. Irons fell in love with the script, and spent four months learning to speak French. Irons felt that it was advantageous to have an Englishman play the role of Swann. Just as Swann, as a Jew, was an alien in Parisian society, Irons felt alienation in Paris because he was English.

The element which makes *Swann in Love* succeed, however, is not Irons' portrayal of an "English" Frenchman (or a "French" Englishman), but rather his brilliant understanding of obsession and betrayal—for obsession and betrayal are what *Swann in Love* is all about. Swann is a Parisian gentleman who has fallen in love with a high-class prostitute, Odette de Crecy. Swann's love for Odette has jeopardized his social position; in fact, a good friend informs Swann that he will not receive Odette into his home if Swann marries her. Irons treats us to a magnificent view of Swann trying vainly to break the bonds of his obsession, even though this obsession has become his entire being.

Unfortunately, not all of the characters in the movie are as convincing as Swann. Ornella Muti plays a very enigmatic Odette; this, the emotional side of Odette, is done beautifully. However, one is never quite sure what it is about Odette that has caused Swann's fixation, rendering his obsession a bit unbelievable. Whether this is the fault of Muti and her acting or of the script I cannot say, although I would hazard to guess that it is a combination of both.

Another character who does not come across very well is Swann's friend and confidant, the Baron de Charlus (Alain Delon). While Charlus is continually emphasized by the camera work, he does not appear to be incredibly important to the story. One is left wondering why one is treated to five minutes of footage of Charlus' attempts to pick up on a young Jewish intellectual. Is this supposed to illustrate some type of hypocrisy on the part of Swann (who becomes very upset when he finds out that Odette is bisexual)? Perhaps, but if so the connection is far too tenuous. Furthermore, the young man rejects Charlus' advances unconvincingly.

This is one area where the movie fails again and again (and

continued on page 6

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Recruiting on campus: Monday, Feb. 4th.



First Read Swann's Way

from page 5
where it may help to have read *Swann's Way*—one can never fully understand the motivations of the characters. Another good example of this problem is Fanny Ardant, who portrays the wife of one of Swann's friends. She spends much time eyeing Swann and proclaiming that he is always the life of the party, while all evidence seems to be to the contrary. Her fascination with Swann is never explained. Ardant seems to be present simply for the camera to revel in. This is not necessarily a bad thing in itself—Truffaut's camera often revelled in Ardant—but a strong character is needed to support this revelry, and the needed strength is never supplied.

Swann in Love is still well worth seeing. Irons is magnificent, and the cinematography is excellent. Also, as I mentioned before, the subtitles are done well. The only character who loses anything significant in the translation is the Baron de Charlus. I give *Swann in Love* three-and-a-half stars. Now, if you will excuse me, I think I will go look for a copy of *Swann's Way*...

Cotton Club Well Done

from page 5
plays the most loveable thug I've ever seen, as right-hand gorilla for the most likeable of the gangsters (the one who happens to own The Cotton Club, just to keep things tidy).

There's no real way to summarize the music, except to explain that the Cotton Club was one of the few places that black performers could perform and get paid decent money in the 1920s. The only thing was, they could only perform before a white audience. The Cotton Club had a policy of all-black performers, all-white guests. This meant that the best black musical performers of the day (such as Duke Ellington) found themselves performing for some of the best-known white celebrities of the day, many of whom frequented the club. The movie mentions Gloria Swanson, Fannie Bryce, Charlie Chaplin and others, not counting every well-known gangster of the day. The point is that the black performers could only hit the big time by performing in a place that made sure that they knew "their place". Depressing, but true.

The musical numbers are marvelous, the staging is fantastic, the scenery, costumes and props for the movie explain how the thing could have cost as much as it did. (I've heard \$40 million bandied about, which is quite a bit of bandying). The acting is outstanding, and, for once, Francis Ford Coppola has relented and made a movie that is *entertaining* as well as artistic. The characters are shallow, but no more than one normally expects from either a gangster movie or a musical, so that's no surprise. There's a little violence, but it's only bloody once or twice. Considering what Coppola *might* have done with the gangster-period violence, this was amazingly restrained.

Overall, *The Cotton Club* is well worth seeing. It's well-crafted and highly entertaining. Definitely four stars.

More Stats on Health Program

from page 3
than the typical graduate student income. The outpatient benefit is limited to \$150 per illness, a limit which may readily be exceeded on the second or third referral to a health specialist, who might charge \$100 to \$150 per visit in fees alone. In response to my concerns on these matters, Administrator for Student Affairs Lyman Bonner, also a member of the Student Health Committee, has in the past defended the immutability of our existing Student Health Insurance by stating that no problems of inadequate coverage have ever arisen. But some students have come close—close enough that even Lyman Bonner admitted it might be time to change things. However, as yet nothing has been done. Here too, I would be interested in knowing of cases where students have come close to the limit of our health insurance benefits, or of any unusual interpretations of the policy's exclu-

sions by Mutual of Omaha.

In the fall of 1982 the Health Committee performed a brief survey of dental health care among all students, which was followed in the spring of 1983 by a survey performed by the Graduate Student Council designed to assess in more detail the need for dental insurance among graduate students. This second survey, to which 634 (73%) of graduate students responded, revealed that, of all those graduate students responding:

- 85% had no dental insurance
- 60% believed they received less than adequate dental care
- 72% spent less than \$100 per year for dental care, and
- 84% considered expense the sole or major factor in determining the level of dental care they received.

In addition, 16% of those responding wrote comments as to the desirability of a comprehensive dental health plan. Although the Health Committee unanimously en-

dorsed motions calling for the administration to consider dental insurance, it is unclear whether the absence of any progress is due to an unresponsive administration or the failure of the Health Committee to properly pursue the matter. I have only recently learned that the GSC dental health survey had not been forwarded to J. J. Morgan or any other member of the administration by either Lyman Bonner or Bruce Cain, although they had each received two copies of the report.

It is my hope that recent concern expressed by Dean of Graduate Studies Arden Albee and Vice-President for Student Affairs J. J. Morgan about matters affecting graduate student life will evolve into progressive measures to reverse the continuous erosion of our ability to obtain health care which has been the reward for our efforts and dedication. This is clearly in the present interests of the Institute if Caltech is to attract and maintain the best students given competition from

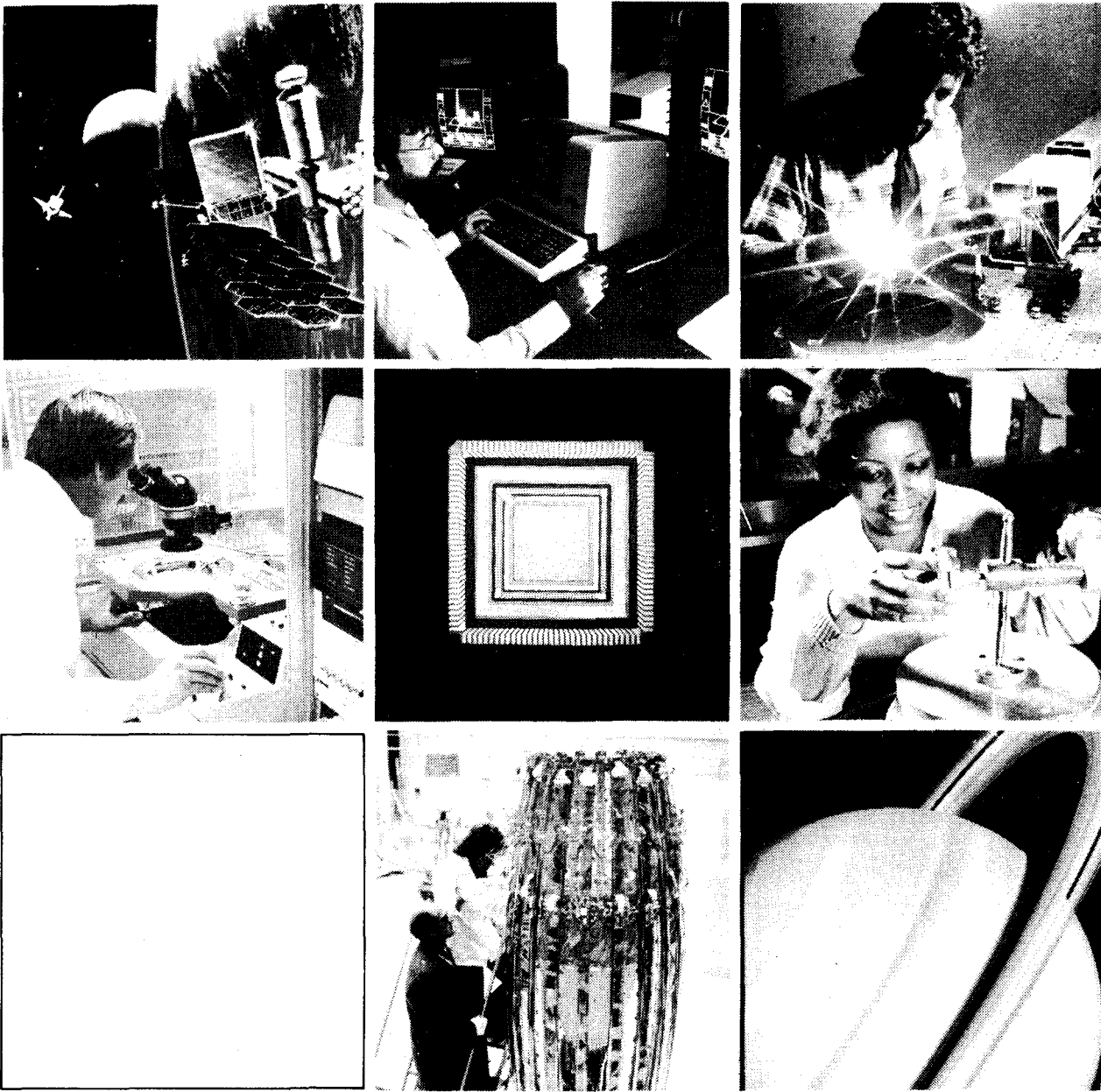
nonacademic sectors. It is also in our present and future interests if we are to survive graduate school with our teeth and, for those of us who plan to remain in academics, to be able to offer our graduate students what they deserve.

Direct questions and comments to George Carman, GSC Health Rep., 216-76.

Election Spirit

from page 2
but it probably will be used that way in the future. In this new function, it suddenly becomes a useful fact that the treasurer and the president rarely overlap, and can therefore be run in the same round of elections without causing a conflict for any individuals.

These speculations are, to a degree, just that and may be overdone. Nonetheless, it is an interesting new feature like the NO vote and the write-in. Its full implications and motivations ought to be considered and understood by voters and candidates.



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—photo by Ron Gidseg

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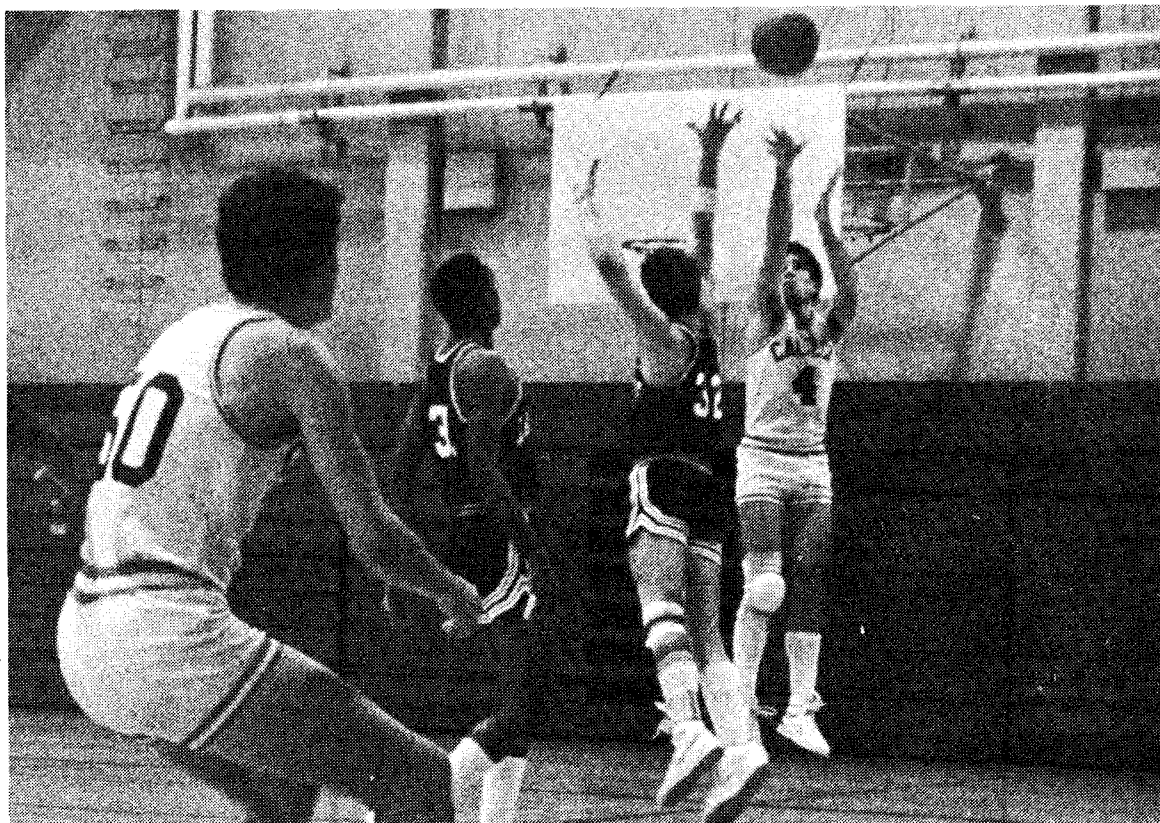


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Weekly Sports Calendar

| DAY | DATE | TIME | SPORT | OPPONENT | LOCATION |
|------|------|---------|----------------------|---------------------|--------------|
| Sat. | 1-26 | 4:00 pm | Swimming (W) | Redlands | Redlands M/W |
| Sat. | 1-26 | 1:00 pm | Men's Tennis | Faculty | Caltech |
| Sat. | 1-26 | 7:30 pm | Basketball (Varsity) | Pac. Bap. Bib. Col. | Caltech |
| Tue. | 1-29 | 2:30 pm | Men's Tennis | Christ College | Caltech |
| Tue. | 1-29 | 8:00 pm | Hockey Club | Pierce#2 | Conejo Rink |
| Wed. | 1-30 | 4:00 pm | Wrestling | La Verne | Caltech |
| Wed. | 1-30 | 6:00 pm | Basketball (JV) | Pomona-Pitzer | Caltech |
| Wed. | 1-30 | 8:00 pm | Basketball (Varsity) | Pomona-Pitzer | Caltech |



—photo by Ron Gidseg

Chris Kyriakakis scores over La Verne in CIT victory

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announcements

Material for the announcement section of the California Tech must be submitted typed on or with the Announcement Form available at the Tech office by the Tuesday before the Friday of publication.

PA 15 Meeting

There will be a meeting of the PA 15 class, which is the student newspaper, at 12:15 pm Friday, in 127 Baxter.

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If you would like to place an ad in the classified section of the California Tech please send your ad along with your name, address, and telephone number to: The Tech, 107-51 Caltech, Pasadena CA 91125. Ads must be received by Tuesday before desired publication. Ads cost \$.40/line with a \$2.00 min. and prepayment is required.

C.W.E. vs. P.D.Q.

The Caltech Wind Ensemble will present a free concert on Tuesday, January 29, at 8:15 pm in Ramo Auditorium. Featured will be music by J.S. Bach, P.D.Q. Bach, and John Philip Sousa. Graduate student Mark McAdon will play a solo for tuba and band. The concert is sponsored by the office of student affairs.

Career Discussions

The Alumni Association and Gnome (know-me) Club will sponsor this year's first career counseling session on Thursday, January 31 at 7:00 p.m. in the Alumni House. The theme will be "Careers in Mechanical Engineering." Beer, soft drinks and munchies will be served.

Students will have the opportunity to ask questions and enter into informal discussion with a panel of three Caltech Alumni: Ron Helin ('53), Director of Engineering at Bourns Instrument, Inc.; Jim Hendrickson ('53), Supervisor of Structures and Dynamics Development Group at JPL; and Ed Stofel ('53), Senior Scientist for Spacecraft Power Sources at Hughes Aircraft Company.

SCPC Meeting

There will be a meeting of the Student Computing Policies Committee (SCPC) on Tuesday, January 29 at 5:00 pm in the conference room upstairs in Booth. All students interested in using the student computing facilities should attend. Topics include UNIX on DG4.

Free the Orchestra!

The Pasadena Community Orchestra, under the direction of Wayne Reinecke, will present a FREE concert tonight, January 25th. The program, produced with special guests The Pasadena Chorale, will include Haydn's *Symphony No. 103* (Drumroll), the *Overture to Russian and Ludmilla* by Glinka, and Verdi's *Te Deum*. The concert will begin at 8:15 pm, and takes place at the First United Methodist Church, 500 East Colorado Boulevard.

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Procrastination

In order to make changes in your patterns of procrastination, it is often most helpful to understand the reasons behind them. On Tuesday, January 29th, beginning at 4:00 pm in the Caltech Y Lounge, the Career Development Center will offer a two-hour workshop on Procrastination: Causes and Contributing Factors.

There is a limit of no more than 20 participants, so DON'T DELAY! Begin to break that habit now and call the Career Development Center to sign up.

Chamber Concert

There will be a free chamber music concert tomorrow night, January 26, in Dabney Hall Lounge at 8:00 pm. Caltech students will perform chamber music by Haydn, Mozart, Telemann, and Dvorak. For further information, call (213) 684-8964.

Shabbat Service

Everybody's invited to help celebrate the Sabbath this evening and the next two Friday evenings. The informal service begins at 5:30 and ends at 6:00. It is held in the Y Lounge on the 2nd floor of Winnett. Call 793-3859 for information, and call prior to Friday in order to be assured of being invited to a free Kosher Sabbath dinner after the service. Everybody is welcome.

C L A G S

The Caltech Lesbian and Gay Society will meet this Sunday at 2:00 in 210 Baxter. This week's business will include arrangements for the roller skating trip on Wednesday. Everyone is welcome to attend.

Freedom & Spirit

Come hear the last talk in a series by a fascinating speaker, Jonathan Omer-Man, on "Autonomy, Authority and a Free Spirit," Tuesday, January 29 from 4:30-6:00 pm in Winnett Lounge. Sponsored by Hillel. Everyone welcome.

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If you are a U.S. Chess Federation rated chess player and would like to play for a Caltech team at the U.S. Amateur Team Championship, to be held in Pasadena on Feb. 16-18, please contact Eric at x4836 or 794-4340 by Feb. 1 (team entries must be postmarked by Feb. 2).

Hoser Hockey

Do you ever get the urge to eat back bacon or say "eh?" If so, you should be playing road hockey with the "Canadian Club". We meet to play every Saturday at 11:30 am in the parking lot north of Beckman Auditorium. Come join us! Everyone is welcome to participate (hockey sticks will be available for use).

Coffeehouse Notes

1. The Coffeehouse is open (8 pm to 1 am weekdays; 6 pm to midnight on weekends).
2. The Coffeehouse will be giving away all its old comic books (not the ones on the rack) Saturday (tomorrow) beginning at 8:48 am. First come, first served.
3. Last term, someone was borrowing our comic books without permission. Some are still missing. If you know who did this, I would appreciate it if you would castrate him (if it's a her, please change punishment accordingly) and return the comics to us.

Picture Deadline

Seniors! The deadline for your senior pictures is Feb. 1—that's only one week away—so what are you waiting for? Take that picture now! Any pictures received after Feb. 1 may not appear in the *Big T* senior section.

Send your black and white print (no color, no negatives, please) to "Big T", 107-51 Caltech, or deliver to Glen Crawford, Rm. 242 Ruddock. Be sure to include your name, major and hometown as you would like them to appear in the *Big T*.

T-Shirts For Sale

The Caltech Chinese Student Association is having its yearly T-shirt sale. The T-shirts are made of 100% cotton. The shirt is white with a black design of "Caltech" on the front and "Caltech" in Chinese on the back. \$7.00 each. Good material and good deal! Sizes available are S(32,34), M(36,38), L(40,42). Call Christine Yu at 795-3503. (Limited offer).

Model UN Meeting

The Model UN will have its second meeting on Tuesday afternoon, January 29 in Winnett Clubroom 1 at 12:30 pm. All interested please attend.

Hostile Party Time

The Hostile Women's Day Picnic & Dance Party is tonight in Winnett from 9 pm to whenever. Bring your own beach chairs and picnic baskets, or just come to dance. Everyone (male or female) who's ever been angry is invited to come dance away their bitchiness.

Sigma Pi Sigma Money

The Society of Physics Students has announced a new SPS Scholarship funded by the Sigma Pi Sigma Trust Fund. The first award, in the amount of \$1,000, will be for the 1985-86 academic year. Applicants must be juniors majoring in physics and must be active members of the Society of Physics Students. Application forms are available in the Financial Aid Office. Applications must be postmarked on or before January 31.

Engineering Money

Scholarship awards of \$1,500 each will be made for the 1985-86 academic year from the American Society of Naval Engineers. Support for undergraduate work is limited to the student's final one or two years of undergraduate education. Support for graduate education is limited to one year. Applicants must be U.S. citizens who demonstrate an interest in Naval Engineering and who are enrolled in a full-time program leading to an engineering degree. Please contact the Financial Aid Office for additional information and applications. Application deadline is February 15, 1985.

Materials Money

The Society for the Advancement of Material and Process Engineering (SAMPE) is pleased to announce the continuation of its annual scholarship program that will offer 12 \$1,000 awards to undergraduate students.

Applications and further information are available in the Financial Aid Office. Deadline for filing applications is February 1, 1985. In addition, SAMPE offers a year's subscription to the SAMPE Journal at no cost to each applicant.

Caltech 107-51
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The California Tech is published weekly except during examination and vacation periods by the Associated Students of the California Institute of Technology, Inc., Winnett Center, Caltech (107-51), Pasadena, California 91125.