

The woods are lovely,
dark and deep,
But I have promises
to keep,

THE CALIFORNIA TECH

And miles to go before
I sleep,
And miles to go before
I sleep.

VOLUME 85

PASADENA, CALIFORNIA / FRIDAY, MARCH 9, 1984

NUMBER 21

Caltech Aces La Verne

by Silver Ace

The Caltech men's tennis team rolled over La Verne Tuesday in its first league victory of the season. The final score, a total of seven matches won versus two matches lost, accurately reflected Caltech's level of playing and its domination over La Verne. Five of the seven wins were in straight sets.

Although Caltech's losses were the first singles and the first doubles matches, the team showed its depth by winning all of the other singles and doubles matches. Rajiv Sahney won second singles 6-2, 2-6, 6-3, Pete Rodriguez won 3rd singles 6-4, 6-4, Ryoji Watanabe won 4th singles 6-2, 7-5, Ashok Krishnamorthy won 5th singles 6-2, 6-1, and Khanh Nguyen won 6th singles 6-3, 3-6, 6-3. The doubles scores were similar, with Rex Wang and Khanh Nguyen winning 2nd doubles 6-7, 6-3, then default, and Mark Wiczoriek and Tom Nolan winning 3rd doubles 6-3, 6-1.

The Caltech tennis team showed much potential on Tuesday. There is an even distribution of classes among the 15 members of the team, including five freshmen. Three of the nine that played on Tuesday were freshmen, Khanh Nguyen, Mark Wiczoriek, and Top Nolan.

Although the Caltech men's tennis team is still far away from beating the likes of Redlands or Pomona-Pitzer, there is certainly plenty of room and potential for improvement and the team's performance could significantly improve in the future.

There are matches twice a week, every Tuesday and Saturday. The home matches are on Tuesday afternoons, so come by and watch if you want to be able to see some good tennis. The season will continue third term.



Women's Week: Politician Shirley Hufstedler speaks on women's achievements Tuesday (above) and Ruth Barrett and Cynthia Smith play dulcimer music at the OWC Noon Concert Thursday (below).



Caltech Wins Putnam Exam

by Chris Meisl

Caltech won the forty-fourth annual William Lowell Putnam Mathematical Competition, with team member Alan Murray placing in the top 10 individual scores in U.S. and Canada.

Charles Cuny and Brad Broc, the other members both received honorable mentions, according to Professor Richard Dean who administrates the exam for Caltech.

Other honorable mentions were Eric Kawamoto and sophomores Jung Im and Everett Howe.

Since the first Putnam competition in 1938, Caltech teams have placed first 9 times, second only to Harvard University's 10. In third is the University of Toronto, with 4 wins.

Caltech last won the Putnam Exam from 1976 and received an honorable mention in 1981.

The victory earns \$5000 for Caltech, and the money will be used to maintain the Eric T.

Bell and Morgan Ward Prizes for Caltech undergraduate work in mathematics.

Alan Murray will receive \$250 for his top ten standing, in addition to the \$200 given to each member of the winning team.

The Putnam Competition was established in 1927 by Mrs. William Lowell Putnam when she created the William Lowell Putnam Intercollegiate Memorial Fund in honor of her husband.

Currently, the exam is administered by the Mathematical Association of America.

Each exam, which is given in two parts for morning and afternoon sittings, is designed to test both technical competence and originality.

Additional information on the competition can be found in the American Mathematical Monthly, which regularly reprints the exam questions and sometimes includes the solutions.

Beavers Strike Out

By Doug Oute

The Beavers tried to make a respectable showing at La Verne last week, but were simply overwhelmed by their opponents' superior offense and lost all three games.

Not all was dark for Caltech, however. Steve Havstead put on an offensive show of his own, raising his batting average from .500 to an awe inspiring .666 to become the league's leading hitter to date. Havstead destroyed the La Verne pitching staff, picking up five hits in five at bats on two doubles and three singles. He also drew six walks in the series, as La Verne failed to keep him from reaching base even once.

Mercifully for La Verne, the rest of the Beavers were not as hot as Havstead. In Saturday's first game, the Beavers lost 14-3. Phil Scott ac-

counted for most of Caltech's offense, picking up two hits in three at bats.

In the second game La Verne walloped the Beavers, handing them an 18-3 loss. Pat Harrison had a home run for Caltech, and Steve Havstead picked up two hits.

On Tuesday the Beavers did a slightly better job of quieting the La Verne offense, giving up 12 runs. Unfortunately, that was more than enough, as Caltech collected only six hits, and lost 12-2.

Steve Havstead led the way with three hits in three at bats. Bob Mostert, Russ Graymer, and Michael Keating also helped out, each chipping in one hit.

The Beavers take a rest during finals week, but return in spring break to play Pacific Coast Baptist Bible College away on Tuesday.

Turbulence Offered For Finals Week

The turbulent movement of fluids, such as bodies of water or air currents, and new approaches to understanding this complex phenomenon, will be the topic addressed in the second Caltech winter/spring Earnest C. Watson Lecture, "Turbulent Flow," on Wednesday, March 14. Dr. Paul Dimotakis, associate professor of aeronautics and applied physics, will begin his talk at 8 pm in Beckman Auditorium. Admission is free.

Familiar instances of turbulent flow such as floods and storms at sea have awed and

fascinated humans from their earliest awareness of their environment. Yet, such occurrences have resisted examination from the observations of Homer and Leonardo da Vinci, to the efforts of many distinguished contemporary thinkers. Dr. Dimotakis will discuss how new ways of visualizing and measuring flow may aid understanding of turbulence. This development could have a significant impact on such areas as achieving combustion efficiency, power plant and jet engine construction, and pollution control.

Nominations Open for ASCIT Appointed Offices

Nomination sheets have been distributed to the house presidents to be posted in each house. The offices that are available are:

ASCIT Executive Committee¹
Social Activities Chariman
President's Staff
Elections Chairman
Educational Policies Committee²
Communications Director³
Student Darkroom Chairman
Publications Darkroom Chairman
Totem Editor
Big T Editor
little t Editor
Big T Business Manager
little t Business Manager
Tech Business Manager

Anyone can sign up for these jobs. The nominations will be open through the end of March but sign up soon because interviews will be starting at the beginning of next term.

**It's
TQFR Time!**

Now that finals are coming up soon, it is TQFR time. Here's your chance to praise and/or criticize the courses which you are taking. Please fill out your TQFR forms before you forget, and send them in. Additional

¹ The excomm is responsible for interpreting the bylaws and advising the BOD. Two people (representative and alternate) will be chosen from each house.
² This committee compiles the TQFR and selects candidates for the ASCIT teaching awards.
³ This person will be in charge of researching the cheapest long-distance calling service for the student body.

Notes

comments about courses are appreciated. Extra forms may be picked up opposite 105 Winnett, or in 126 Lloyd. Please turn in forms from first term also, if you haven't done so yet.

letters

Support ERA As Well

To the Editors:

It's really nice that Congress and Caltech have declared a week (March 4-March 10) to recognize women's achievements. Now what is needed is for us to urge Congress to ratify the ERA so that women get 365 days of recognition, not just 7.

—Al Seckel

Shair Explains

To the Editors:

I would like to clear up a misconception concerning what I was reported to have said at the 1984 Faculty Student Conference. You quoted me as say-

ing "Everytime we do something new, it's going to be controversial. That's why nothing gets done." The fact is that things do get done. We have a healthy SURF program which is growing. A lot of faculty, students, support staff and donors have made this happen!

Now that the Provost and the Vice President of Student Affairs are considering ways in which SURF can become a permanent option for our undergraduate program, I'm very optimistic, and I stated so at the Conference. However, I did say: Participating in the development of the SURF program at Caltech has been "character-building experience."

—F. H. Shair

Chan Was Misquoted

To the Editors:

I call your attention to the following statement in your recent article on the Faculty-Student Conference (March 2 issue) page 1, column 4.

"Chan also explained that the course is lectured by several different professors so that each can spend more time on his research and lecture only on topics in his area of expertise."

I'm afraid I can't claim credit for this insight! The problem is that it's a cop-out, and I cannot in good conscience support it. Someone else must have been the source of that remark. Check the tapes.

—Sunney Chan

ON THE RECORD

by Chris Meisl

The Takács Quartet presented an excellent program at last Sunday's Coleman concert, playing with an enthusiasm unequaled by earlier quartets in the Chamber Music series.

The youthful group began with the Haydn's first "Erdödy" Quartet. This popular work, composed between 1796 and 1798, is one of Haydn's early successes at introducing polyphony during a primarily homophonic period.

Next on the program was Bartók's third Quartet, surely the most difficult he wrote. It was followed by another modern work, Webern's Six Bagatelles and its unusual demands on the violinists.

Beethoven's Quartet in E Minor, Opus 59, No. 2 followed with the incidental melody in the third movement that later the Coronation Hymn in

Mussorgsky's opera Boris Godunov.

After a rousing applause, the Takács Quartet added a couple of interesting encores.

First was the pizzicato allegretto of Bartók's fourth Quartet. The entire movement is played by plucking the strings.

The second encore was a melodious arrangement of Schubert's string orchestra works that don't use double bass.

Coleman's next concert will be the Tokyo Quartet with violinist Raphael Hillyer on April 1

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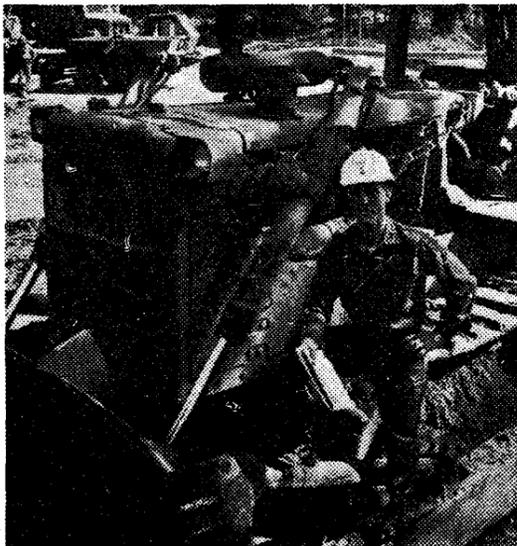
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2nd Lt. Frank Quackenbush majored in civil engineering at the University of Arizona and was a member of Army ROTC.

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The Caltech Y Fly-by

Friday...March 9

Noon Concert—A special surprise for finals week. (We don't know who the band is either.)

Last Day to sign up for the Ski Trips over Spring Break.

Sign-Ups for the Sailing Flick during Break continue through Monday.

Seniors—Decompression IS tomorrow (and Sunday).

Saturday...March 10

Decompression—There is NO substitute. Relax and shoot the breeze with a friend. Free food, milk, entertainment and smiles. Satisfaction guaranteed. 9-12 pm, Winnett Lounge.

Sunday...March 11

The Fun Continues with 3 more hours of Decompression. Don't feel left out.

Wednesday...March 14

The euphonic Y presents the L.A. Philharmonic. Sign-ups begin Friday, March 9. (Note: same program as the March 9th performance.)

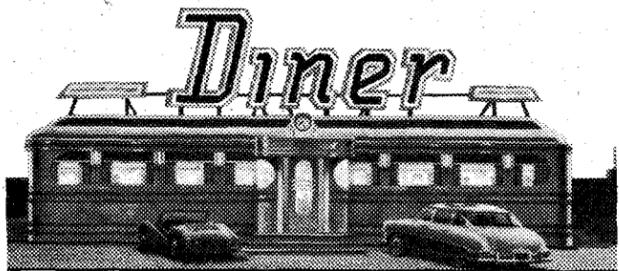
Thursday... March 29

There will be a trip to Pomona College to the multimedia presentation based on the biblical book of Habbakuk. Tickets are only \$1 (normally \$2.50), and transportation will be provided. Sign up in the Y office.

The Union of Concerned Scientists presents "Weapons in Space," a two-hour national teleconference on April 5. A panel featuring Dr. Carl Sagan, Dr. Richard Garwin, Adm. Noel Gayler, and Dr. Henry Kendall will discuss the various aspects of space weapons and ballistic missile defense during the first hour of the program. The second half will provide an opportunity for scientists around the country to ask questions of the panelists in Boston. You can participate in the L.A. television audience. It is necessary to register in the Y office before March 16.

For more information contact The Y at 356-6163.

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Minted Ladies?

Popular speaker Dr. Walter Ostromecki will return to the Caltech-JPL Numismatic Society on March 21 to talk to the club on "A Tribute to America's First Ladies". In addition, the meeting will feature the always enjoyable and sometimes profitable coin raffle. Lucky winners return home with choice additions to their collections such as silver 50 cent pieces or obsolete two or three cent pieces from the 19th century.

Meetings are held the third Wednesday of each month at 7:30 pm in the Church Laboratory Building on campus. All members of the Caltech-JPL community are most welcome to attend.

Carnation Awards

Each year Caltech awards upwards of twenty Institute and Carnation Fellowships. These awards are based solely on academic and/or research excellence, and are available to any freshman, sophomore, or junior enrolled at the Institute.

If you are interested in applying, applications will be available in the office of Carolyn Merkel (207 Thomas) or Chris Smith (331 Baxter) between March 5 and March 20, 1984. They should be returned by March 27.

Support Your Spine

On Thursday, March 15, the OWC (Organization for Women at Caltech) is sponsoring a noon program in Winnett Lounge that will teach participants how to help, provide relief for those aching muscles.

Joanne Bartelt, massage therapist at the Pasadena YWCA and former instructor in massage therapy at San Diego State, will give a demonstration-lecture, teaching some simple techniques people can use to help each other relieve muscular aches and pains.

Participants will be invited to pair off and practice what is being preached.

Ballistic Defense

The Caltech World Affairs Forum will be meeting on Monday, March 12 at 7:30 pm in the Y Lounge to discuss "Ballistic Missile Defense." All members of the Caltech community are welcome to discuss this issue of technology and policy. Refreshments will be served. Business meeting at 7:00 pm.

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The Inside World

Blacker: hello. i am a bug, i jump on rodney's typewriter to make the letters come. how are you. i am fine. marjorie and the kids are fine but i think my son may have mono. for a bug, that can be fatal, you know. did you know that this week is bug week. you should take a few minutes each day to think of what good we do for you before you squash us with your hush-puppy soles. we never step on you so give us a break, ok. —a bug

Dabney: No entry.

Fleming: No entry.

Page: Bring back Bloom County!

The Penthouse Party was successful. Glad we could help, Fleming. And thank you, Pepperdine, for loaning some of your women.

The Page shirts are IN. Get psyched for ice skating the beginning of 3rd term.

Good luck on all of your finals and enjoy spring break. —GMAL

Lloyd: I know, I know. I'm behind again. (Iso)Tropic alley (bad pun not original); challenged Headquarters; we accepted in lowest sleeping position and won. The basement slumber party was a success.

Inferno beat the excited alleys.

The "analloydalley" Challenge was won by KAOS. Bowling granny style is 'un! Thanks to Tropic alley for this idea.

Farrell's was also fun. The new social team is shaping up nicely.

Until next time, —Staff

P.S. Fill out the TQFRs and Social Surveys! (this public service announcement brought to you by this newspaper as a community service.)

Ricketts: Well here it is, final strike again. This week aside from all those last assignments and papers Ricketts has kept itself busy with renewed trayball in the courtyard and Interhouse volleyball. The mighty Ricketts Ath-folks are currently 3-2 and will play Page tonight in a battle for third place. Scurves, don't forget to sign up for TWBF before Sunday. Now go out there and study for those finals! —Bob Bolender

Ruddock: Last week we had a broomball game with Blacker. I missed it, but from the size of Yarmo's bruises, it must have been a wild game.

The third-story Ruddock lounge has been used quite frequently as of late, and t the same time (strangely enough), the number of sightings of tan Rudds has been on the rise. Hmm...

It's been a good week in Ruddock sports. We took possession of the Discobolus trophy on Sunday, and now the Ruddock volleyball team has surged to a 5-0 record. Nee-ner.

Spring break is almost here, folks. Let's jettison. —Chris Mihos

Much Ado

The Theater Arts Program (TACIT) will hold auditions this Friday and Saturday, March 9 and 10, for the spring productions of Shakespeare's *Much Ado About Nothing* and *The Dragon's Tale*. Auditions will be held in Winnett Lounge on Friday at 7:30 pm and on Saturday from 12:00-6:00 pm. For information: x6259 or just come to the auditions.

Financial Aid Forms

The deadline for submitting financial aid applications for 1984-85 is rapidly approaching. The College Scholarship Service requires that students mail their FAF or SAAC to them *no later than March 26*. Please stop by the Financial Aid Office (Room 10 Parsons Gates) to pick up your forms and send them in *soon*. Questions? Ask.

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