Tonight down here in finders Town I water There's a beautiful full moon rising above

the cars ruskin' By home from the mill
the Mansion on the Jill. -Bruce Springsteen

I tip my hat to the new constitution, Take a bow for the new revolution, Smile and grin at the change all around, Pick up my guitar and play (Just like yesterday), Then l'll get on my knees and pray, We don't get fooled again.
-Peter Townshend




## ع861 <br> *



116 .



Roll down the window, Put down the top
Crank up the Beach Boys, Baby, don't let the music stop



## We're gonna ride it till We can't ride it no more From Ruddock to Dabney




## From the West Side...

...to the East Side


Everybody's very happy
'Cause the sun is shining all the time
Looks like another perfect day

## I love Caltech (We love it!) I love Caltech (We love it!)



Look at those mountains, look at those trees
Look at that bum over there, man He's down on his knees


## Look at these women

 There ain't nothin' like 'em nowhere


# Music 



## (We love it!)




## Frosh Camp

(We love it!)



## The Circus

(We love it!)


# Interhouse 

(We love it, we love it!)




PARTY

# THREE SUBBJECT NOTEBOOK <br> <br> 120 SHEETS/COLLEGE \& MARGIN 

 <br> <br> 120 SHEETS/COLLEGE \& MARGIN}
$11 \times 8^{1 / 2}$ Three Insertable Tab Index Dividers
Made especially for Western College Bookstore Association


33-787
Made in U.S. by National Blank Book Co., Inc., Holyoke, Massachusetts 01040
little known fact The electronic-vibsational-votational-zranslation-oink spectra


Rigid rotor Rigid rotor of


Ella.
 different for diff different for diff

for given quantum state

distance $R$, incuse $\mu=\frac{1}{\frac{1}{\mu_{0}}-\frac{1}{\mu_{B}}}$

$$
E_{J}=\frac{\hbar^{2}}{2 \mu R^{2}} J(J+1)=B J(J+1)
$$

deverly called rotation ul cost
 mean $n$ is ground state mean $n$ is excites shot h

$$
E_{n \nu J}=E_{n}+\left(v+\frac{1}{2}\right) \nu_{n} h+B_{n} J(J+1)
$$

$\Delta E_{\text {pramition }}=\Delta E_{n^{\prime \prime} n^{\prime}}$ (elect $)+h v_{n^{\prime}}^{\prime}\left(v^{\prime}+1 / 2\right)-h \nu_{n^{\prime \prime \prime}}^{\prime \prime}\left(v^{\prime \prime}+1 / 2\right)$ $+B_{n^{\prime}} J^{\prime}\left(J^{\prime}+1\right)-B_{n^{\prime}} J^{\prime \prime}\left(J^{\prime}+1\right)$
ro-vibsonic transitions

$$
\left(x^{\prime \prime}, r^{\prime \prime}, 5^{\prime \prime}\right) \rightarrow\left(n^{\prime}, v^{\prime}, J^{\prime}\right)
$$


if you let these couple, nothing works \& problem is suitable for 108
see cotton ro-vibronic transitions
Booker Oppenheimer approx.
ch al students
demonstatains
new hae of
M. M Squeal

$$
\left.\frac{|l| l \mid}{\mid} \right\rvert\,
$$

$\psi(e l$, rib, wot, trans) impossible to solve



$$
H\left(e_{j}, V\right)=\left(T_{A}^{\infty}+T_{B}+\frac{e^{2} z_{A} z_{B}}{R_{A B}^{\infty}}\right)+\sum_{j}^{e_{j}} \frac{-\hbar^{2}}{2 m} P_{j}^{2}-\sum_{j} \frac{z_{A} e^{2}}{r_{n j}}-\sum_{i} \frac{z_{B} e^{2}}{r_{B j}}+\sum_{j>j} \frac{e^{2}}{r_{j k}}
$$

$$
\Psi_{\text {total }}=\sum_{n} \underbrace{\varphi_{n}\left(r_{\text {re, }} R_{A B}\right)}_{\text {basis set }} \chi_{n}(n v C)
$$

BO approx $\varphi_{n}(r ; R) x_{n}(R)$ assume nucleus move slowly enough can assume motionless
Assume electron move like nuclei fixed (same as assuming sep. tween elea stats large cup to ribrational spacing); nucleiare heavier than electrons. "KE coupling offer elev sta cur se neylergat anitod potential energy surface

attempting to make pup. Squat lase

demonstration of population inversion using prof Sepenation of wi, not, trans
and now a word from our sponsor:


$$
\begin{aligned}
& \psi=\operatorname{lelin}_{\text {en }}^{u_{0}^{c}} \Rightarrow H=H_{l} l+H_{\text {lib }} . \\
& N_{A} o_{e_{3}} \text { dizen value }-\varepsilon=\varepsilon_{e p}+\varepsilon_{\text {lib }}
\end{aligned}
$$

## EVENTS OF -91i

Frosh Camp
Pickle Family Circus
CLAGS Posters burned
CLAGS Dance
Freeze Week
Interhouse
Bomb Scare
Sing Noel
Dedication of Braun
Fleming-Dabney Orange Wars
ASCIT Elections
Moose Issue of The California Tech
Watson Lecture:
The Mechanical Universe
Brigadoon opens
Noland Leadership awarded
Darbs Kidnapping
Sports Day
Jam Room Fundraiser
Ditch Day
Sunney's Goodbye Party
KELROF
Commencement

Mho 9-12
Mho 18
Week of Weber 7
Weber 21
Weber 23-27
Tesla 10
Tesla 18
Henry 4-5
Henry 14
Weber 9 on
Hertz 26
Newton 7
Newton 19
Pascal 25
Joule 2
Joule 4
Joule 19
Joule 21
Joule 23
Watt 3
Watt 4-5
Watt 24

Event of -91i: Mechanical Universe

## Frosh Camp



# And they wandered in From the city of Angels Without a dime 

 Wearing coats that shine Both red and green colors From their sunny island

From their boats of iron
They looked upon
The promised land
Where surely life was sweet
On the rising tide to Catalina They ride into the sea
See the glory of the Royal Scam




Pickle Fa




(Wifhouf going ouf of me door 9 can know things on earth Withouf looking out of my window O can know the ways of heaven
The farther one travels
The less one really knows -George Harrison

## INTERHOUSE




## The MechanicalUniverse





## Iew $_{\text {ew }}$ Buildings




I'm an urban guerrilla I make bombs in my cellar I'm a double-e taylor I'm a potential killer I'm a street fight dancer I'm a revolution romancer What's inside is cancer I'm a two tone panther


Let's not talk of love and flowers and things that don't explode You know we used up all of our magic powers trying to Do It In The Road!
So watch out mister business man, you're empire's about to blow!
Now I think you better listen, man, in case you did not know I'm an Urbane Guerrilla! Gotta Stay Cool!
-Dave Brock Bob Calvert



BOMBS:
Above: Before
Above right: During
Right: After?



## NOT BOMBS:

 Left: Before Left below: During Below: Relaxing afterwards


## An Incident (above), Another (see Fleming), and the...

## 'Momentous' IHC Decision of -91i

In order that such actions are clearly realized as wrong by the members of Fleming and the rest of the Caltech community, the following measures are thus enacted:

1) Fleming House will pay a fine of $\$ 1500$ to the Master of Student Houses by June 10, 1983.
2) Fleming House apologizes to Steve Gomez and Don Buchholz of Dabney House and to the Caltech community for Fleming's actions on April 21, 1983.
3) Fleming and Dabney agree to the following "Non-aggression" pact and pledge to abide by its statement and its intent.

It is the sincere hope of the IHC that this incident, with regards to its effect on relations between Dabney and Fleming House, is thus resolved.

## Non-aggression Pact

1) All members of Fleming House and Dabney House shall not engage in any aggressive or antagonistic action, whether physical or verbal, towards members of the other house.
2) This moratorium shall exist until the close of the 1982-83 school year.
3) Members of both houses must realize that it is their responsibility to make this pact work. In this regard it is imperative that all individuals seriously consider and take direct responsibility for their actions.

The following account of last Thursday's Fleming-Dabney incident was written and approved by the IHC on Wednesday, April 27:

The actions of Fleming House on April 21, 1983, which prompted the IHC decision of April 24 are not entirely clear to most members of the Caltech community. In the interest of minimizing incorrect speculation and maintaining openness within the community, we present the following summary of those events.

The abduction of Don Buchholz and Steve Gomez was planned ahead of time at a Fleming House meeting specifically called to discuss possible retaliation for the fact that Don and Steve, among others, had posed for a picture with the stolen Fleming flag and Country Club sign. The two were taken in the early afternoon and brought to a Fleming off-campus house, where they were bound and not allowed to leave. The total time for which the two were kept was approximately $21 / 2$ hours. In the course of their attempts to escape, some minor injuries were sustained. Most importantly, Don and Steve made it very clear that they did not want to participate, and the IHC considers it totally unacceptable for individuals to be held against their will.

This the text of the IHC ruling, which was approved unanimously at a special meeting held last Sunday, April 24: In accordance with the powers vested in the IHC by Section 5 of the Resolutions to The Definition of the IHC which states "The IHC shall have jurisdiction over RF's between houses and is specifically empowered to act as it sees fit in matters concerning the RFing of one house by another," we take the following action.

The IHC feels the actions taken by Fleming House on April 21 with regards to two members of Dabney House are completely unacceptable and are an affront to the idea of a community based on honor, trust, and mutual respect. It is felt that Fleming acted in an aggressive and overly physical manner.


## CAREER

## OPPORTUNITIES



THE ONES THAT NEVER KNOCK



Every job they offered you is to keep you out the dock -The Clash


The leader's wife takes a government car In the dark to meet her minister But the leader never leaves his door ajar As he swings his whip from the Boer War

He wore a leather mask for his dinner guests
Totally nude and with deep respect He proposed a toast to the votes he gets The feeling of power and the thought of sex!


Well the people must have something good to read on a Sunday -The Clash



Well he went down to dinner in his Sunday best Excitable boy, they all said
And he rubbed the pot roast all over his chest Excitable boy, they all said Well he's just an excitable boy
-Warren Zevon


ashlloon $\because N \mid N G$

FANGE PASSIT

## Sports Day Scores

Faculty<br>Ten Gradturkeys Six Undergrads


 -



One day, you'll look To see $9^{\prime}$ ve gone But tomothow may nain So l'el follow the sun

Some day. you'll know 9 was the one
But tomortrow may nain So l'll follow the sun

- Dohn Lennon 1 Paul MoCartney



## COOD-BYE, SUNNEY:







KELROF.


## Commence ment


 Ef



Oh the benches were stained
With tears and perspiration The birdies were flying

From tree to tree
There was little to say
As I stepped to the stage
There was no conversation
To pick up my degree -Bob Dylan



QUANTUM MECHANICS FOR WOMbATS (


BAND
CAPTAIN KIRE'S
INSIGNIA BLEEDS

CLAM CHOWDER

(2)

"THERE ARE SOME WAVE FUNCTIONS THAT CANT BE 12EA AND I APOLOGISE FOR THAT"
(4)


- e-Stan

WHIT COMB

## How To Use Your Senior Section

By Oink Zeggpold
Hi, pigz, and welcome to the senior section of this year's Big T! I have been told to tell you how to use this section, but unfortunately, I have no idea how! So you'll just have to figure it out as well as you can from the fine drawings




2. Doug Heirich Ann Arbor, Michigan Engineering
3. Jon Quilliam (beer sign with long red tube)

Everett, Washington Engineering
4. Toby Tyler Mystic, Connecticut Engineering
5. John Cramer Seattle, Washington

Engineering

## 6. John "Chip" Meiling <br> San Pedro, California Engineering

## 1. Ichiro "Ich" Sugioka <br> Kyoto, Japan Ae/ME

2. Dan Kostka<br>Minnetonka, Minnesota

3. Tom Berto

San Anselmo, California
ME

## 4. Mary Heinrich <br> Conifer, Colorado AE

5. Vladmir Matijasevic
Beograd, Yugoslavia APh
6. Dave \& Lyn Adler

Pasadena, California APh





1. Michael J. Mettille

Neward, Ohio Chemical Engineering
2. Armand J. Capote

Brooklyn, New York
Chemical Engineering

## 3. Ilene Reinitz

Geochemistry
4. Lorna Anderson

Sacramento, California
Chemical Engineering
5. Julia Kornfield
Los Altos, California Chemistry

## 7. Mario E. Fajardo

Tulsa, Oklahoma
Chemistry



## 1. Robert Golden <br> San Marino, California Chemistry

2. Vince Powers<br>Newport Beach, California

Chemistry

3. Andy Liu<br>Los Angeles, California Chemistry

4. Jonathan Parker

Hermosa Beach, California Chemistry
5. Lynmarie Thompson

Manhattan Beach, California Chemistry
6. Justine Armantrout
Bakersfield, California Chemistry



1. Michael S. Weston

Los Altos, California Engineering
2. Leif Bennett

Playa Del Rey, California APh/Eng
3. Alex Leibovich

San Jose, California Engineering
4. Steve Knowles

Gig Harbor, Washington
Engineering
5. Jim Scoby

Park Ridge, Illinois Engineering
6. Bruce Behymer (right)
Hanover Park, Illinois Engineering



1. Frederick Wieland
Garden City, New York
Astronomy

2. Bruce Sams<br>San Francisco, California<br>Astronomy

3. Mark Cornell<br>Godfrey, Illinois Astronomy

4. Eric Sinn<br>Pasadena, California<br>Biology

5. Dean Shibata

Westminster, California
Biology
6. Sung J. Yoo

Bronx, New York Biology
7. Paul Kienker

Palatine, Illinois Biology



Money Maugling


4. Ramanuj Basu<br>Warminster, Pennsylvania Biology

5. Gary Tanigawa<br>Aiea, Hawaii<br>Biology<br>6. Steven Chin<br>Wantagh, New York



1. Gary Mockli

Lakewood, California Biology/Chemistry
2. Nancy Krehbiel El Cajon, California Biology
3. Joe McIntyre

Bellingham, Washington
Biology/Engineerin
7. Glenn Nakamura

Sepulveda, California Biology/Chemistry



1. Mark Warner Maier
Los Angeles, California

Engineering
2. Virginia Konikowski Chan

Southington, Connecticut
Applied Physics
3. Larry Gross

Encino, California Engineering
4. Graham Zaretsky

Spring Valley, New York Engineering
5. Elton Inada

Honolulu, Hawaii Engineering/Social Science
6. Jeremy Leader

Princeton, New Jersey Engineering


5. Russell Quong

Palos Verdes, California Electrical Engineering
6. Brian C. Richards

Issaquah, Washington
Electrical Engineering

## 7. Jeff Berner

Glendale, California Electrical Engineering


(Illuminating fluorescent tubes by drawing a 10 cm arc from a 250000 volt Tesla coil-hence the expression)


1. Tom Murphy

Dallas, Texas
2. Chris Thompson

Winnipeg, Canada
3. Andy Berkin

Encino, California
Physics

Physics

Physics
4. Richard Miles

Bethesda, Maryland
Physics

5. Jim Cummings

Pasadena, California Physics
6. R. Sekhar Chivukula
Lincoln, Nebraska Physics/Applied
Mathematics
7. Richard W. Pogge

Ridgecrest, California Physics



1. Chi Fong

Los Angeles, California Chemical Engineering
2. Tony Conneally

Lombard, Illinois Chemical Engineering
3. Thelma Nunez

Tucson, Arizona
Chemical Engineering
4. Greg Sayles

El Sobrante, California Chemical Engineering
5. Thomas R. Sim

Eugene, Oregon
Chemical Engineering
6. Arthur Fortini

Bronx, New York Chemistry/Chemical Engineerin



Great art requires a full frontal approach.

## 1. Russell Almond Maple Glen, Pennsylvania Mathematics

2. Rod Morison Huntington Beach, California
3. Vivek Joshi Grand Forks, North Dakota Mathematics
4. Dave Younge San Jose, California Mathematics (At last, justice-eds.)
5. Sandra Tsing Loh at the Tuilleries

Malibu, California






## 1. Ming-Chung Chu <br> Hong Kong Physics

2. Greg Schenter

Richland, Washington Physics
3. Bjorn Matthias
Berlin, Germany Physics
4. John A. Behr

Woodlake, California Physics
5. Walt Wuensch

Clinton, New York Physics
6. Brent Stuart

Walnut Creek, California Physics
7. Vipul Periwal

New Delhi, India Physics/Mathematics



1. Duke Briscoe
Athens, Georgia Engineering

## 2. Greg Houssman

Torrance, California Engineering

3. Dave Durham<br>Albuquerque, New Mexico

Engineering

4. Dan Leonski

Los Angeles, California Electrical Engineering
5. Tze Kin Ip

Houston, Texas Engineering

## 6. Risto "Sam" Sjogren <br> Los Angeles, California <br> Engineering

7. Charlie Strauss

Seattle, Washington
Electrical Engineering

"'My mug shot."



1. Daniel K. Jew Bell Gardens, California
2. Chris McKinnon

Great Falls, Montana
3. Russel "Rusty" Schweickart Sacramento, California Engineering
4. Alan Dellamore Ogden, Utah Aeronautical Engineering/Mechanical Engineering
5. Noemi de la Puente Monterey Park, California Environmental Engineering
6.Gloria Badilla Union City, California Civil Engineering



1. Bill Polson (right)

Saginaw, Michigan Applied Physics Skip Shot (left)
Lexington (VA), Budapest, Los Angeles AqG

## 2. Barret Lippey

San Jose, California Applied Physics

## 3. Scott Sperling

Tustin, California Applied Physics
4. Chris Jacobs

Cincinnati, Ohio Applied Physics
5. Jim Dewitt

Santa Monica, California Physics
6. Ed Miles

Oxnard, California Applied Physics





1. Lee Hasiuk

Philadelphia, Pennsylvania Engineering
2. Dan Dickerson

Pasadena, California Engineering
3. John Souder

Edwards, California Mechanical Engineering
4. Jahn Dyvik

New City, New York
Engineering
5. Mike Kilby

Bethesda, Maryland Mechanical Engineering


1. Rebecca Sheets

Wentzville, Missouri Biology
(and Kibor-thanks to Animal Actors of Hollywood)
2. Beverly Ann Robertson

Whitehorse, Yukon
Engineering
3. Derek Straub

Littleton, Colorado
Chemistry
Julie Anderson
Pasadena, California
Chemistry


#  <br> HAROLD \& MILDRED 



# RECENTLY ESCAPED FROM THE CALIFORNIA INSTITUTE OF TECHNOLOGY 

ARMED WITH THE TRUTH
LAST SEEN HOPPING EAST

1. Kevin Hughes

Fair Oaks, California Mechanical Engineering
2. Luis Monsalve

Los Angeles, California Engineering
3. Maclen B. Marvit

Swampscott, Massachusetts
Physics

A

1. Howell Johnson

Seattle, Washington Engineering
2. Cynthia Shaver

Sierra Vista, Arizona
Environmental Engineering

## 3. J. P. Clejan <br> New York, New York Engineering

Thanh Diec
Columbia, Connecticut
Electrical Engineering
Carla Ahlstrom
Salem, Oregon
Chemical Engineering
Mark Chitjian
Redondo Beach, California Engineering


6. Karl Clausing

Camarillo, California Electrical Engineering

Scott Bloom<br>Oyster Bay, New York Physics

Vincenzo Cammarata Tom's River, New Jersey Chemistry

4. John S. Wang

San Francisco, California Electrical Engineering
5. Hamid Johari

Tehran, Iran
Engineering

David LePoire
Holland, Michigan
Physics
Kenneth Chow
Hong Kong
Physics




# BURGLAND: 

Land Of
Many Swine

Rail Road HH1HH1
Highway -

Interstate Highway
City
(Das) Kapital City
15 Church
©1983 Burgland Tourist Information Agency


The history of Burgland is as rich as the variety of produce available on Burglund. Who can fail to be stirred by the poignant portrait of its greatest hero, the late General Paul Burgland, in whose honor many of the prominent features are named. General Burgland is shown defending Burgland's Strategic Oil Reserves from an intruding unidentified DC-10 bomber. He blunted the attack by firing four shots from his breechloader, the enemy fleeing in the direction of Ethiopia.

Burgland was originally settled by the Vikings, who abandoned it. A few years later, the Tahitians discovered it and sold it to the Ceylonese, who bartered it for a few head of cattle to the Ethiopians, who had no way to reach it. The Ethiopians rented it to a visiting Etruscan couple, the Qooneys, to whom everyone on the island today can directly trace their lineage.

The Qooneys prospered and, one evening, Maark Qooney discovered a single eggplant seed washed up on the shore-the humble beginnings of the fabulous Qooney Zeggplant Farms, the major employer on the island today. As the Farms grew, the Ethiopians, while still not having a way to reach the island, threatened to raise taxes, and, in the stirring speech of July 4, 45 a.d., Burgland declared independence from Ethiopia.

Burgland's history of military mastery is unparalleled in the free world. Burgland has thwarted every major attack on its sacred shores, from Genghis Khan to the Japanese in World War II to the
 Argentines in last year's short-lived Burgland Islands war.

So, whether you are a wealthy capitalist or a common pauper, Burgland is the home for all


## BURGLAND: land of INDUSTRY

Your business can prosper here on the island paradise of Burgland. We have many natural resources and many highly skilled technicians. We are proud to have been able to contribute to the American Voyager space probe program; the mechanical boom-clasp pictured above on the probe was manufactured here, hence its name "The Burgland Arm". It can even open beers. Contact the Burgland Tourist Information Agency for further information on transplanting your budding business to Burgland.

# BURGLAND: <br> land of CONIR ASIS 


©1983 Burgland Tourist Information Agency

## ADVERTISEMENT



Bustling nightlife of downtown Paul, featuring giant Marmot, an BTIA Building Number 42z, near BTIABN 36d (left) and BTIABN 108c (right, soon to be demolished).

## BURGLAND OFFERS MANY OPPORTUNITES:

-Distant from many emerging nations
-Small size (country area: $1 / 4 \mathrm{mi} . \times 1 / 4$ mile) means you're never far away from anything
-Quaint rural setting in the shadow of The Volcano, yet nearby to the bustling nightlife of downtown Paul
-Legalized gambling on exciting race riots in Oinkville
-Two modern steam railroads to serve your industrial needs
-Convenient daily flights from Burgland International to Addis Ababa, Ethiopia
-No U.S.-backed, Soviet-supported, Libyan-trained, neo-Nazi, black-Moslem, low-fat terrorist death squads
-See scenic giant Marmot herds (in downtown Paul!)
-For further information, write the Burgland Tourist Information Agency


President George Washington Burgland, Soldier, Statesman, Scientist, is working on new uses for zeggplants. Here, he visits the Office of Public Morals to give a lecture on his famed Zeggplant Oil Drop Experiment

## A message from the President:

Hi.
How ya' doin'?
I'm doin' alright, myself.
Well, good night.

## This has been a message from the President.

 ELMER THEMIOCKOSAURUS

Trios 3.1. $p \neq p^{\prime}, L \neq L^{\prime}$. Then $\exists 1$-1 map of pts on $L$ to pts. ip $L^{\prime}$, lines on $p \longleftrightarrow$ lines on $p^{\prime}$, pts. on $L \longleftrightarrow$ lines on $p$.


P (Dual)
$p^{\prime}$
Also special cases: $\quad \frac{i^{p} r_{L}}{P}{ }_{\sim}$ etc
A. I. Checkerboard problem: Tar remove two white squar in normal sense?
Also: Try w/ a $|x|$ boo
HOUSES

$C L E V \equiv R$ MOCKOSRURUS DECIDING TODAY'S MA RI NOT ES WILL NOT $B \equiv \equiv S P \equiv C I A L Y ~ G O O D$.


MATt $\rightarrow$ Finite Projective Plane $=$ Finite Prjectue Plane .

$$
\pi 1=\lambda \text { "AS IT SHOULD BE" -AR }
$$

$$
n+1=r=k
$$

$$
n^{2}+n+1=b=v(n \geqslant 2)
$$

$n=o r d e r$ (not to be confused with $r$ der)

(ED):


$\square$

ThEOREM 3.3. QED.
Mos Mockosaurus masquerading as
No, Mc Boniface Soda Devotion.
NEW MARTIAL ARTY
FUM CONG TO THENER
NEAR YOU SOON.
T形BEM 3.4... (Bese-Steons; 1938,1939)
A finite projective plane $\Pi, n$ is equiv to a set of $n-1-L-5-0-n$. Pf. $\Pi, n . L$. $\left.p_{1}, \cdots, p_{n+1}\right\}=L . q_{1}, \cdots, q_{n^{2}} \notin L$.
Lines through $p_{j}: L, 1,2 ; \ldots, n$. $\overline{q_{i}, p_{j}}=a_{i j}$

$$
\left.A=\left[a_{i j}\right]_{n+1}\left(i=1, \cdots, n^{2}\right) j=1, \ldots, n+1\right]
$$



Check $r$, QED.

$$
\Leftarrow \text { Check } V \text {, QED. }
$$



$$
\text { So } H_{\text {DY, K K } D S} \text { ! }
$$

Proofs AR = No FUN!
PLATYPUS $\rightarrow$ HOWS IT GONG, EH?
Continuing saga of THeorem 3.4 proof. (See Mark's notes) $\longrightarrow$ NR $L=T T B E A$ MATHEMATICS SYSTEM.

THE OINK Theorem:
T:(3.2), (3.3) hold. $n^{2}+n+1 p t s, n+1$ lines/ pt, $n+1$ pts/line $\Rightarrow \pi$ FPP order. $\Rightarrow \vec{f}$. On Mart's Paper (No Doubt)




Two score and eleven years ago, Arthur Fleming brought forth upon this campus a new house, conceived in unity and spirit, and dedicated to the proposition that all men were not created equal to Flems. This proposition has been annually tested and always found to be true, and this year was no exception.

The year began with our annual sojourn to Catalina Island's Frosh camp. After weathering the storm, the Flem's returned ready to tackle rotation. The frosh pick went very well and Fleming ended up with a fine freshman class which even included six women. The formal dinner was again the social event of the season with Rajiv Sahney displaying the fierce role of pledgemaster to our young froshlings. So fierce was Rajiv that he had Gene Pottenger making Basto noises for a video game with a broken speaker. The end of initiation was followed by our annual pageboy wash in page house. Page house reacted by moving Flem-to-be Frank Kragh out of page and onto the Olive Walk. As if page wasn't enough, ballless Lloyd House stole our pool balls and returned a week later to our lounge where we had a leisurely Lloyd wash.

Fecathalon was held and won by Alley 3. This was followed by only one alley challenge all year, when Alley 1 challenged Alley 3 to a game somewhat like Blindman's Bluff, where the two teams tried to squirt each other with bottles of ketchup and mustard.

This year's Interhouse theme was James Bond. The play was, as usual, a great success. Bond, played by Mike Hisey, took care of the secret agents (all played by Mike Oliver) sent by each of the other houses in an attempt to place him in Bondage. The lounge was transformed into a profitable casino and bar, complete with authentic paintings from the Huntington Library. Under the supervision of John Sahr, a submarine was built which was intended to surface in the courtyard, but due to excessive rain and weak rope, it sank. In spite of this, it was a very enjoyable Interhouse.





SOPHMORES
FIRST ROW: Uwe Hollerbach, Chuck Nainan, Bret Clark, Mike DeKay, Faye Flam, Jim Wu, Chen-Wei Han, Kurt Lempke, Stefan Feuerabent, Joe Cheng, Mike Lodman, Mark Beauchamp.
SECOND ROW: Rex Wang, Rajiv Sahney, Martin Martinez, Dave Watkins, Marvin Shannon, Glayde Myers, Jonathan Brown, Linda Liu.
NOT PITCURED: Kenny Baker, Charlie Miller, Bill Butler.




The rest of the term proceeded smoothly, and although occasionally bothered by other members of the community, we did not display our "obscure martial arts techniques" or use our sync bricks on their heads. The juniors signalled finals week by ringing the bell for the AMa 95 final - an unpopular social event. Finally, the long awaited Christmas break arrived.

The beginning of second term was marked by the return of Glen Swindle. For one week, Fleming rocked and reeled as the Swindleites raided the alleys in search of frosh, water and trouble. This was soon followed by an orange war with Dabney House. Even though they got up on our rooftop, they were pelted to a quick defeat by our superior marksmen on Firestone and the Synclab.

Sometime during second term, Alley 6 started the nauseating habit of incessant jello consumption. Whether eaten, drunk or injected, jello found its way into the stomachs and minds of nearly everyone in Bat Alley. The Alley 6 band made several appearance at jello parties before they were finally washed up. A jello-suckers vs jello-haters water fight was started one night which soon spread throughout the entire house, with few bystanders managing to stay dry. Alley 6 also started a flour fight one night which eventually sifted its way into page house. Ganja Alley, also known as Higher 3, went on a rampage, leaving their mark, a green dot, on everything in sight. The battle escalated as Ganja Alley woke up one afternoon to find its walls covered with red, orange and blue dots. People will probably be finding green dots in Fleming House for years to come.



In an attempt to turn the house's attention to more serious matters, the juniors challenged the rest of the house to a game in any Interhouse sport. The juniors made up their own shirts for the event, white with a red F on the front, and "84" in red on the back. Soccer was chosen, and the juniors came in a close second after a hard fought match. It at least served the function of getting almost everybody in Fleming House to stop trolling for a couple of hours.

Elections were finally held, and John Sahr, Russell Natter, Mignon Belongie and Ned Wingreen took office as president, vice president, secretary and treasurer, respectively. The new Social Team consisted of David Childs, Dave Watkins, Mitch Smith, Frank Kragh and Betsy Arnold. The new Ath Team (almost the same as the old Ath Team) consisted of Stewart Peebles, John Krehbiel, Stefan Feuerabendt and Robert Franciosi. The Frosh Work Chairman, Sean Eddy, became the new librarian. On the campus scene, Fleming demonstrated its political clout with Candi McCoy elected as ASCIT president and John Krehbiel as IHC chairman.

After Glayde Myers inherited the office of IAC. COFH from Steve Jones, Indoor Olympiad was held. The seniors won, followed by the juniors, the sophomores and the frosh. The most interesting event was probably the the jug race, which was won by a team of frosh girls. This was soon followed by a brutal and unprovoked orange attack by Dabney House, which seemed to be mainly for the purpose of breaking as many of our windows as possible, and which seriously injured a bystander. Of course, Dabney House was not punished.



FROSH
FIRST ROW: Gene Pottenger, Mitch Smith, Betsy Arnold, Karl Clauser, Mark Laffoon, Mike Baumer, Scott Roland.
SECOND ROW: Scott Chou, Mike Graham, Christian Bower, Joe Yang, Kris Koresko, Mark Schuyler, Sean Eddy, Steve Deming, Sarah Santoro, David Ring, Lisa Skumeda, Mark Ross, Frank Kragh, Janice Pata, Brian Rose, Kevin Donavan, Wilson Yee, Ken Wong, Robert Franciosi, Vicky Shimizu.
NOT PITCURED: Pam Fong, Marit Jentoft-Nilson, Ara Kassabian, Everett Simons, Skip Todd.


Finally, the term ended and the Flems went on spring break. The annual Fleming House Ski Trip to Mammoth Mountain was a great success, with only three people breaking or injuring their legs. Everyone had a good time, on the slopes, at the condos, in the jacuzzi or out on the town, and a new tradition was started when Stefan was "banked" for being a "head" the whole week.

Third term started out with a softball challenge from professor Bruce Cain, which Fleming won. Then, the Fleming Juniors challenged the page juniors to any interhouse sport. They chose football, but unfortunately, the outcome of the game is unknown at the time of this writing. The bearded physicists failed to make a comeback this year, but the junior physicists banded together as the Men of Maxwell. The Fleming House Society of Mechanical Engineers was soon formed, and challenged the Men of Maxwell to a game of football. Unfortunately, the results of this game are also unknown at the time of this writing.

Third term saw Uwe Hollerbach shave his head, John Quackenbush and Glayde Myers pierce their ears, Sean Eddy turn his room into the Alley 6 head with six toilets, and Mark Eggleston build his fantasy spark discharge device, which half of Fleming House helped to finance. The juniors celebrated only having 400 days left until graduation by making a Tommy's run. Nick Gross got a new stereo at least a hundred times louder than his old one, much to the dismay of the rest of the inhabitants of Alley 1 and 6. A joint attempt was made to drown out his stereo, which was unsuccessful until they finally goaded him into blowing out his amp. Of course, it was soon fixed.



JUNIORS
FIRST ROW: Mark Abeln, Tom Kupiszewski, Mike Oliver, Dave Childs, Mignon Belongie, Harold Olfari.
SECOND ROW: Scott Stephens, John Krehbiel, Tim Magee, Don Hendrix, Stephen Jones, Terence Barr, Candi McCoy.
THIRD ROW: Cu Phan, Tom Remmers, Doug Shors, Nerd Wingreen, John Sahr, Stewart Peebles, Eric Grannan, Joel Villajunior.
NOT PITCURED: Steve Baur, Theresa Birdseye, Jeff Cavallaro, Don Fossgreen, Mike Gorder, Tarik Naheiri, Eric Pan, Jeanne Weaver.



Third term also saw the most serious event to happen in Fleming in recent years. It started when a photograph was found showing a bunch of people, mostly Darbs, wearing Faggot shirts and standing around our Fleming Country Club sign and our Go Big Red banner. In retaliation, Fleming House decided to kidnap some of the people in the picture and hold them hostage until the items were returned, a plan masterminded by Doug Shors and Scott Stevens. Two Darbs were kidnapped, the items were returned within a few hours, and the people were released. The Darbs complained, so the IHC fined us the ridiculous sum of $\$ 1500$, while the original thieves went unpunished. Nonetheless, the house proceeded to collect money to pay the fine, increasing house spirit and unity in the process. One of the more entertaining methods of collecting money was the waiters' special dollar floats without backfloats, with all money going towards the fine, highlighted by John Quackenbush pouring applesauce down his pants in exchange for someone donating $\$ 20$ to the house. A drive to drop out of ASCIT was started, so that the money from the dues could be spent on the fine instead, and at least thirty Flems dropped their membership, much to the dismay of ASCIT.






Ditch Day finally came, after a very convincing false alarm the week before. The stacks were all pretty good, and so were the bribes, so none of the seniors had their rooms counterstacked. At exactly 5:00 the cannon was fired, thanks to some gunpowder that was part of Mike Kilby's bribe.

Outdoor Olympiad was held and won by the juniors. The seniors came in last for the fourth year in a row, this year mainly due to lack of participation. Fortunately, the other three classes showed up, and the seniors were not missed very much.

Third term was the last term in Fleming House for the RA's, Kris and Teresa Meisling, and of course, Sarah. Fleming can not overstate their value to the house nor the respect we have for their opinion, participation, loyalty and cookies. As they leave Fleming House and enter Meisling House, they will certainly be missed. We wish them great success in their endeavors.

As can be seen, this has been an exciting and rewarding year for Fleming House. The end of the year will see the senior class graduate, taking with it the traditions and history of the past four years. The beginning of next year will see an awesome frosh class enter Fleming House, creating traditions and history for the next four years. Nevertheless, the spirit of Fleming House will always remain, and may this account reveal that spirit, being of Fleming, for Fleming and by Fleming. Let the Deed Shaw.



## SENIORS I

BOTOM ROW: Becky Sheets, John Souder, Dave Huff.
MIDDLE ROW: Mike Kilby, Gloria Badilla, Dave Hayes, Thelma Nunez, Dave Durham, Noemi de la Puente.
TOP ROW: Cheryl Robertson, Lorna Anderson, Bob Helbing.
NOT PITCURED: Armand Capote, Karl Clausing, Andy Duncan, Mark Egglestone, Joe Garvey, Ray Gralak, Tze Kin Ip, Steve Knowles, Young Lee, Maclen Marvit, Vangelis Simoudis, R.J. Snook.


SENIORS II
John Quackenbush, Nick Gross, Jim McCuskey, Tom Murphy, Phil Albert.



## $\mathscr{L} \mathscr{Y} \mathscr{H} \mathscr{H} \mathscr{O}$



## The Year

While it is generally agreed that the year did in fact begin, few have a clear idea as to exactly how. There was the necessary evil of Rotation, after which we washed and sanitized about thirty new frosh, gave them pizza and crossed our fingers.

The social team of Phyllis Li, Phyllis Li, and Phyllis "I like that frosh" Li then proceeded to ply the house with social events. Warlords Burt Gallup and John "Stick" Rostykus misplaced Ruddock's and Fleming's pool balls. Ball-less Fleming (in more ways than one) once again went beyond the bounds of decent retaliation and stole our TV set and pool balls and messed up our pool table.

We took our frosh to breakfast at Tommy's early in the day, and, no doubt feeling jealous at having been left out, the Fleming frosh came over en masse and we had a leisurely Flem wash (except that more Lloyd frosh got wet than Fleming frosh). Accidents happen.

Interhouse soon reared itself, and after recovering from the initial shock of building Interhouse early, Lloyd House joined the efforts of Alaric Clinton, Ross Berteig, Don Fossgreen, and Chip Meiling to build a damn fine Interhouse display. Sergay built the baked potato.

Corona, the land of Beautiful people, succeeded in throwing a great Halloween party. Tetsuo Fukuchi and Mark Pitt of Beserk Enterprises went all the way after the party-utterly beserk. Pitt spent the evening shouting "Whee" and tossing his shoes back and forth while Tetsuo made a pass at every wench in sight.

Second term brought that dreaded house meeting known as erection night -no, that can't be right - election night. Sergay Mnatzakanian became Ayatollah, Jeff Clayhold became Veep, Elizabeth "I can't type" Newman became Secretary, and Praveen Asthana became Chancellor of the Exchequer, assisted by his pleasantry-exchanging roomate, Tim White.

Second term Lloyd showed spirit in sport -we creamed the other houses in tennis and did well enough in the other sports to win several Dicobolus points. Corona, the land of fair maidens and "Duh....who you calling stupid" men beat us in a volleyball challenge.

Third term brought forth that famous non-event, the Lloyd House Spring Extravaganza, which didn't occur this time because of
pressure from the CalTech administration. So,instead, with a little encouragement from Inferno, we ran through the other houses informing them that they did in fact suck quite a bit.

And once again, Corona, where women blow and men plunder, challenged the rest of Lloyd to a sport-soccer this time. With a little help from "Pele" Movshovich, Corona was defeated. We had to buy them a keg of beer to console them. Brion said it was to stop Charlie Strauss from crying. Meanwhile, back at the house, Brian Lund (who?) was this year's invisible frosh though most Lloydies wished there were a couple others like him too.

Special commendations this year go to the social team, John Rostykus, Jeanine Gainey, and Alaric Clinton for the magnificent work they did in providing social events for the house, Takayama for looking after the coke machine, him and Kawamoto for cleaning the Library, Bob Shore for not being here most of the time, and Dave Gallup and the KELROF runners who did over 205 miles, proving that they were fairly daft but studs anyway.



Ron in cute mode.


Robert Hill
Our Illustrious RA's Despite the handicap of being Sally Rigden Furriners, they were all right.


Our President- one hell of a real cool Ayatollah.


Good night John-Boy.


Note the resemblance.


Hey Man, I'm ready.


And the correct answer is Liz Newman's nose.


Cake in the face.


Elizabeth Newman


Elizabeth Newman



Mehrdad, after being Treasurer for 6 months.


Scott Paine studying for his driver's exam.



The good thing about bananas is that they have no bones.


## King Mikey (The Jew)

and his adulatory, well fairly adulatory, flock.


Part of our ongoing effort to ridicule Julian West.


What do you mean it's not Ditch Day today?


## $\mathscr{T} \mathscr{H} \mathscr{C} \mathscr{C} \mathscr{L} \mathscr{L} . .$.


.......and those who responded



The Ernie S. Cohen Memorial Nose


The Ernie S. Cohen Memorial Fan Club


Ernie S. Cohen


Norman Baatz with yet another question on linear spaces.


First aftempt.



Bingo



Hotleas Hashimoto


And we took the frosh to breakfast.


On the Air-Greg "The Man, The Year, The Show" Bala, one of the more obscure residents of Lloyd House, was DJ on KKAL on Saturday nights, with Joe Burfoot as engineer. He pretty much catered to the tastes of Lloyd House, his loyal audience, but also played some novelty songs, such as the Water Special.


Freshmen
L to R (Front)-Diana Foss, Harold Felton, Robin Wilson, Ashok Krishnamoorthy , Sanjay Agarwal, Yosufi Tyebkhan.
Kneeling behind-Takako Matoba, Dave Gallup, John Rostykus - - - Sandra Lee.
Followed by-Andrew Swanson, Tammy Choy, Jeanine Gainey, Norman Baatz, Salman Mitha, Joe Kovalik, Theron Stanford.
Followed by-Brian Bohn, Joe Whirtley, Mark Jacobson, Ross Berteig, Myles Susman, Gordon Smith, Brian Lund, Min Su Yun.
Also Pictured-Stuart Ray.
Not Pictured-Chris Chen, Jack Ausman, John Bruckner, Rodney Van Meter, Karen White, Amy
Yoshida, C. D. Yoo.


Sophomores
L to R -Irene Replogle, Chris Tiller, Alaric Clinton, Hojin Ahn, Phyllis Li, Ed Casey, Brett Garett, Creighton Asato, Mark Pitt.
Standing-Tetsuo Fukuchi, Tad White, Susanna Chan, Andy Hall, Eric Kawamoto, Paul Stankus, Steve Nixon, "Muncher" Ken Adelman, Jeff Freymueller, Dan Briggs, Steve Roy, Christos Kyriakakis, Tim White (no relation to Tad White), Richard Regan.
Not pictured-Praveen Asthana, Carl Masser, Marty Hunt, Hod Greely, Russel Graymer, Paul Haase, Cathy Hayes, Mike Takayama, Jim Kennedy.


## Juniors

Sitting (L to R)-Greg Bala, Ali Kazeroonian, Elizabeth Newman, Lee Sunderlin, Robert Kelly, Lisa Nikodym.
Not Sitting-James Bell, Jeff Clayhold, Joe Frisch, Roy Hashimoto, Scott Paine, Joe Burfoot, Ted Williams.
On the Other Side-Thad Conneally, Don Fossgreen, Lucy France, Joseph Francis, Mehrdad Haghi, Kirk Haselton, Brion Hutton, Steve Martin, Debbie Mathews, Sergay Mnatzakanian, Kathy Sheedy, Steve Trainoff.


## Seniors

Here(L to R)-Ron Francis, Chip Meiling, Richard Mathews, Charlie Strauss - - - John Humphrey, Tom Christian, Vivek Joshi, Lyn Marie Thompson.
Not Here-Charlotte Clark, Tony Conneally, Drew Cushman, Matt Duiker, Jackie Fernandez, Mike Fernandez, Brian Horn, Dan Kostka, Roman Movshovich, Thiti Veipas, Keith Warfield, Jeff Yu.

## Interhouse

For Interhouse this year, the members of Lloyd selected the theme "Restaurant at the End of the Universe". The idea was essentially to set up a place for eating and dancing with a futuristic spacelike atmosphere. A visitor would enter the front door, pass through a gas-filled time warp, and end up in a combination restaurant/dance hall. The design by Alaric Clinton consisted of covering Inferno and Creek alleys as well as the lounge and dining room with black plastic, decorated with stars, galaxies, and other works of art; the alleys served as the time warp, the lounge as the restaurant, complete with bar and hanging tables (built by Marty Sirkin), and the dining area was cleared for dancing to music provided by Joey Francis. In the courtyard was created a launching pad. Built under the direction of Ross Berteig, Work Chairman, this year's Interhouse was felt to be one of the finest Lloyd has ever had.


## $\mathscr{S P O R \mathscr { T }}$



You going to serve or what?


Wait, I think my back is stuck.


This was the year that Lloyd won 3 out of 4 Discobulus challenges (two in football and one in basketball) and marked the first time in four years that we ever had the trophy. In Interhouse sports we faired adequately in soccer and football, but the big story was tennis. For the first time in longer than anyone cares to remember a house other than Page or Fleming won an Interhouse sport outright, and it was us! Led by Ron Francis and Matt Duiker, Lloyd stormed to a $6-\mathrm{O}$ record while losing only 3 matches. Although Ron and Matt are graduating this year (they hope), an athletic group of freshmen and sophomores hold promise for the future.


Just 'cuz I said I like Chem I.



## Credits

Section Editors: Praveen Asthana Theron Stanford

Photographers:
Praveen Asthana Sergay Mnatzakanian

Robert Hill Brett Garrett Norman Baatz

Special Thanks to Roger Fong for Darkroom and Typesetting work


# Ruddock House 



## Home of



## Gods and



## WARRIORS




## And Men Who

## Can Handle It




And Women Who

## Can Take It





Tracy "Chicken in Flight" Petersen


Take this, Alaskan Scum!

The closing days of summer are a call to the faithful, both wizened upperclassmen and wide-eyed frosh, to Caltech. For each, the feeling is different, seniors find a long awaited goal only a few short months away; juniors are resigned to their fate; sophmores face grades with trepidation; while frosh mix anticipation and anxiety in nearly equal parts.

In Ruddock, summer-honed, random, questions confuse frosh more than Chem I; while rotation meetings bring on calls for more singles. Nevertheless, a new frosh class was chosen and welcomed in the traditionally soggy fashion.

Some people have to be forced to stay on board contract.



ORGY!

John Revolta



Yes Carrie, I enjoyed the Prom.




## THE OLD EXCOMM

Front: Sue Gross (Soc.), Frank Evans (Soc.), Mike Curtin (Ath), Pete Lim (Treas), Back: Tom Sim (Veep), Ri-Chee Chou (Pres), Evan Cromwell (Ath), Elton Inada (Sec.), Glen Crawford (Lib.), Anne Sauter (Soc.)


## 致EOXEX

Front: Dierdre McClure (soc), Larry Meixner (Pres), Cinsy McCalley (Veep), Josh Susser (soc), Karyn Betzen (soc), Joe O'Donnell (Tres), Back: Tracy Petersen (lib), Jim Helgren (Ath), David Sahnow (sec), Drew Lindberg(Ath).



Presidential Evolution

## UCC's

A.J. Capowski (4)

Jeremy Leader (6 pt II)

Chris Cotterel (S.G.) Mike Weston ( 6 pt I) Tom Berto (1) Paul Kinker (5) Don Smith (3) Jay Rickard (2)



House Wimps (I to r): Tom Sim, Kevin Hughes, John Behr, Jay Rickard, Ich Sugioka (behind Jay), Don Smith, Mark Maier, Chris Jacobs, Greg Favor, Anthony "Julian" Capowski, Wendy Rasmussen, Tom Berto, Scott Johnson, Mark Cornell, Elton Inada, Paul Kienker, Alex Leibovick, Tim Williams, Mike Weston, Mike Mettille. (LOST IN THE RUSH): Carla Ahlstrom, Loren Alving, Mike Becker, Ri-Chee Chou, Ken Chow, J.P.Clejan, John Cramer, Kaitlin Drisko, Frank Evans, Lisa Flitz, Ron Gidseg, Mary Heinrich, Tom Hensel, Cecile Huling, Paul Johnson, Jeremy Leader, Dan Lenoski, Lyle Levine, Andy Liu, Don Lo, Maclen Marvit, Ed Miles, Vince Powers, Bev Robertson, Cheryl Robertson, Rusty Schweickart, Ken Seibert, Cyndi Shaver, Becky Sheets, Steve Shin, Ken Schrum, Rod Thompson, Camilla Van Voorhees, Walter Wuensch.



## The Way It Was

House Wasted Union (l to r): Don Cohen (Honorary Junior), Brian Lau, Matt Swass, Dave Fun, Joe O'Donnell, John Fong, David Sahnow, David Marvit, Glyn Anderson, Darrell Schlom, Larry Meixner, Evan Cromwell, (Other Casualties): Stephen Anco, Theresa Birdseye, Johanne Bolduc, Daniela Bonafede, John Chang, Jim Drake, Louis Godbout, Charles Hershey, Morry Katz, Greg Kavounas, Irwin King, John Mahoney, Brad Marston, Robert Martinez, Candi McCoy, Mike McDowell, Niels Michelsen, Anthony Miller, Robert Murphy, Paul Munro, Dave Newhall, George Pitt, Steven Riley, Kelley Scott, Glenn Seidmann, Paul Shaffer, Jon Shapiro, Doug Shors, Tony Skjellum, Chris Stassen, Clare Stassen, George Tolomiczenko, Harold Weiser, Todd West, Guy Wisenrakkit, Dave Zobel, And yours truly, Steve Swanson.

## The Way They Wanted It




House Zip's (l to r): Karla Peterson, Anne Sauter, Glen Crawford, Louis Cuellar, Jason Hickey, Chris Cotterel, Doug Simons, Anirvan Ghosh, Ken Chan, Aaron Roodman, Doug Evans, Peter Lim, Cinsy McCalley, Paul Graven, Elliott Lowy, Dave Ruhde, Mark Adams, James Dunn, Brad Lincoln, Brian Bush, Mike Curtin, Mark Lewis, Stan Bielfelt. (Under water) Ian Anderson, Jim Chen, Pam DeMoor, Faye Flam, Jeff Freymueller, Russ Graymer, Glenn Gribble, Sue Gross, Nathan Hood, Bryan Howard, Karen Kurowski, Larry Liu, Bob Myers, Tan Ngo, Eric Olafson, Teresa Solberg, Steve Thomas, Fu-Sheng Tsung, Julian West, Lily Wu, Christine Yu.


Hassle week brought the dubious innovation of both frosh cubes and the first pledgemaster "choice groups" with an average weight of over two hundred pounds. The small fry physicist got picked off, but like in all fishy stories, the big ones got away. And instant status was given to some sophs and seniors with high point values in the showering phase. All ended amicably with a truce on Friday nite.

Interhouse returned to a less "imaginitive" theme with a Water Front Bar. A mellow wharf led to an even cooler den of jazz, at least when not interrupted by the smash and splash of bar fights. Assembly and cleanup were both record breaking, the former for it's speed and efficiency, and the later for it's lack of same.



House Trolls (I to r): Front Row: Sam Wang, Rod Van Meter, Josh Susser, Ken Whang, Kevin Wilson, Jon Happe; Middle Row: Heidi Langeberg, Mark McDonald, Deirdre McClure, Kiyo Yamazaki, Karyn Betzen, Debbie Pinck, Janice Sakai, Alan Maramoto, Sherry Smith, Jesse Wen; Back Row: Brian Tsai, Sing Ung Wong, Drew Lindberg, Huy Nguyen, Dave Werntz, Jim Helgren, John Brendsel, Mario Montessori, James Liu, Nathan Hurvitz, Dave Feldman, Richard Doherty, Tracy Petersen; (Already Insane) Scott Brylow, Dave Chang, Dean Elzinga, Jam Hamrick, Yvette Madrid, Joel Seely, Tarn Tantikijrungruang, Janeen Williams, Paul Young.


# A Week Lasts A Lifetime, As the Days Slowly Mature 

Monday's Child is Fair of Face


Wednesday's Child is Full of Woe


Tuesday's Child is Full of Grace


Thursday's Child Has Far to Go


Friday's Child is Loving and Giving



## Saturday's Child Has to Work for Her Living

## And the Child that's

 born on the Sabbath Day, is fair and wise and good and gay

We were pleased by our house's popularity, as a steady stream of people applied for social membership (a prospective member's "movie" was definitely a first), but as house meetings became almost weekly, some began to wonder

The approach of Christmas was marked on people's doors, with generous prizes to the best ones. Frosh met finals for their first time, and everybody went home for vacation. It was a short-lived break, though, as we soon returned to a wet Los Angeles winter.

The spirits of neither underclassmen nor seniors were dampened, however, when elections rolled around. The underclassmen were afflicted with "he went thataway" syndrome as ex-president Ri-Chee sauntered away to a late snack at the Salt Shaker. Observing this years excomm, it was noted that the "yellow peril" had been repulsed.

Parties took on a new flavor with themes prevailing. Valentines, hats, and black and white all provided excuses for social interaction. To almost everyone's happy surprise (some women were discontent), the "ratio" at parties pulled close to one to one.

With the eventual arrival of May, the rained slackened and every senior's mind turned to ditching. False starts were in vogue this year, seniors needing practice to get up before eight in the morning. When "tomorrow" finally arrived, stacks were the mix of ingenuity and public silliness that Ruddock stacks are known for. Themes ranged from movies (Raiders of the Lost Ark) and books (Foundation and Hitchhiker's Guide), to terrorist bombings and mazes. Nearly all stacks were broken and -oddly enough- all bribes were taken. No Rudd went to bed hungry that nite.

Spring gave way to early summer, jobs were found or missed, finals taken, and another year came to a close. Seniors relaxed at long last, juniors saw the light at the end of the tunnel, sophmores wondered how much longer this could go on, and frosh (after furtive calculations of their expected G.P.A) consoled themselves that at least next year there'd be new frosh.


Smile!

A "turbo-charged" engine



Harder, push harder.


What have we here?

This years poster children.


Many thanks to: Mark M.
Greg K.
Roger F.

Editor Steve Swanson


## PAGE

## Alley Trophy

For the third consecutive year the Greased Frosh Races were held to determine which alley was to have initial posession of the alley trophy. The two alleys in the long, downstairs hallway combined forces and used a moose as a frosh to win the Races. The trophy bounced around 515 South Wilson, weight, and Wun Rhun alleys for the rest of the year.



## Interhouse

Interhouse time floated around with its usual enthusiasm. The river ride was pretty impressive, with a waterfall and a gorilla to greet the river riders after their initial plunge into the river. Farther down the river waited a thunderstrom. Lots of people worked on putting up foliage all along the length of the ride, and everyone had fun naming the rafts.



## Interhouse (cont.)

Behind the scenes were many frosh who were ready and willing to keep those rafts pumped up. Mark put on a laser light show in the courtyard. The band stayed until 2:30 and kept the lounge and dining room crowded the entire time. "Just lean back and I promise you won't get wet."



For Thanksgiving, Barb cooked a big feast for about 20 people who stayed over break.


Pearl Harbor Day was celebrated in grand style as this frosh went to the ocean.

On Valentine's Day, Karen Erickson sent us a heart as big as



The Easter Bunny prepares for her annual visit to Page. On Sunday, we went to Laguna Beach for an Easter picnic - hamburgers, hotdogs and BACKGAMMON! Here, Barb shows Joey dice control.


Greg Schenter parked under a tree.
A new tradition started this year-Fleming House wimps bought and served pizza to Page frosh during a Ph 1 lecture. What a nice gesture! While some Page dudes are having fun on the lawn, a couple of Fems stand on the Olive Walk wondering what to do without the rest of their house behind them.



Figure this one out yourself.

And we did have massive flicking on the Page lawn.

(Above) Don't let this picture fool you!!


Seniors - (L to R): Bill Polson, Brent Stuart, Larry Gross, Russell Quong, Andy Berkin, Chi Fong, Luis Monsalve, Dale Chu, Glenn Nakamura, Dale Chu II, Graham Zaretsky, John Wang, Bruce Behymer, Brian Richards, Scott Bloom, Sekhar Chivukula, Fred Wieland, Steve Chin, Lloyd Franklin, Greg Schenter, Greg Haussman, Bob Golden, Nancy Krehbiel, Karen Close, Scott Michael, Sandra Loh, Rod Morison, Larry Gross II, S- Wad II, Tim Brazy, Bjorn Matthias.
Those who got jobs: Dave LePoire, Harry Mousmoules, Scott Sperling, Chris McKinnon, Greg Sayles, Carlos Valencia III, Ginny Chan.



Juniors - (L to R): Michael Terepka, Erik Fernandez, Ken Hui, Mark Waggoner, Han Toh, Mark Marley, Dave Hawley, Jim Determan, Steve Baxter, Hank Erving, Neil Phillips, Vance Haemmerle, Steve Stahl, Steve Havstad, Dave Chavez.
Those at the beach: Asad Khan, Anthony Miller, Mark Holst, Doug Ruden, Phu Nguyen, Joannes Costa, Joe Lee, Joey Chang, Alan Murray, Pedro Rodriguez, Brad Brock, Keith Holt, Kirk Brattkus, Clara Spalter, Reed Burkhart, Eliza Sutton, Yung Lim, Robert Murdock, Phil Scott, Vince Cammarata, Robert Mostert.

Caveman working out.


Lazy Ass!



Sophomores - (L to R, vaguely): Paul Filmer, Steve Loyola, Michael Gibbs, Richard Premont, Doug Stohler, Manny Acevedo-Ruiz, Dan Davis, Sean Moriarty, Paul Graven, Brandon Mymudes, Steve Kong, Cathy Shapiro, Gordon Vaughan, Pam DeMoor, Ed Felten, Paul Barros, Mark Dombronski, Gerald Zeininger, DAn Schwartz, Lew Aronson.
Still Trolling: Jim Labrenz, Suk-Hoon Yoon, Kelley Cherry, Steve Molnar, John McGowan, Kristian Kvilekval, Jenny Haase.



Frosh - (L to R): Milagros Montalvo, Victor Leyva, Rich Trujillo, Kent Noble, Scott Grossman, Supriya Ghosh, John Herndon, Lisa Cummings, Robby Dow, Hsiu-Tung Yu, Dave Werntz, Ryoji Watanabe, Warren Goda, Sonja Benson, Matt Compton, Tom Luke, Brian Suggs, Hans Hermans, Fred Ferrante, Scott Karlin, Brian Burk.
Those who fell off: Carlos Mussenden, Michelle Miller, Janet Boley, Diane Creveling, Dave Gallup.


(Top right) "Why do the GODS hate me?"

(Lower right) Hire the Physically handicapped.

The Nurling of the Room.
(Bottom) Russel experiments with food.
(Right) Han Toh experiments with bimself.

(Right) A wet frosh is a happy frosh.


## 21's:



Pete wishes he could be oceaned every year.

## 14 's:



Harry (Fish) Mousmoules

Clara...


The Severity Stack required underclassmen to have severity in order to gather beer bottles. The bottles provided the code that would open part of the door to reveal a model railroad. The railroad was then operated to open the door.

When: High Noon. Where: Athenaeum. Who: 5 Page Dudes. What: Strip Tease. Why: Because it's Ditch Day.

(Lower left) Brad Brock was served Servomation lunch on a chess board as part of Sandra Loh's Sandra Loh stack.
(Lower right) The Luis Monsalve/Larry Gross Stack: Sex, Drugs, and Rock n' Roll. Steve Baxter went to Berkeley.



Andy and Russel returned to find a reinforced concrete counterstack. Lesson: never trust a EE!

Harry and Sekhar's bribe of wine, cheese, and other goodies was accepted.



Passers-by remarked that "it's difficult to distinguish between the counterstack and Sandra's room in its usual state."


Laura and Ed, Terrie and Dan, Kathy and Scott, Lisa and Sean at the Ath Formal.



Russell Quong amongst a half-dozen or so lazyass wimps.


Lloydie backing into the Discobulus Trophy with the help of the I.H.C.

## Parting Notes

Oh, by the way, along with all of the numerous social activities and events that we participated in during the year we found some spare time here and there to win the Interhouse and Discobulus trophies-AGAIN! However, the IHC is getting better and better every year at trying to cheat us out of the trophies.


## CREDITS

Editor:
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## Juni





sophomores: (sitting, I to r) Mike Chen, Greg Kopp, DaV Ito r) Rodney Kinney, Bleve Hawes, Mike Lewis, Sala, Frank Hull. Blake Lewis, (A non-sophomore) Mike Yarmore) John George, (A part of another ather. A Richard Lowther, Fred Wong. Bob Henderson, Jacques. Butman, Fie
Missing






## Old Athhole

the 2:00 geyser



A Story, less fictive and less factual than the transubstantial original. A remembrance. All characters both livingundead. Certainly quintessential. The names have been. Will be again. The place is the thing. Wherein. Catecch the kenscience of thinking. This is a story. Jest. A story. All lights revered.

Force Traum
Early on morning two boys blew into court on the breeze. House of chaos, house of couches; take one.





1) Seniors (clockwise from upper left): Richard Pogge, Bruce Sams, Mario Fajardo, Anne Hermann, Sam Sjogren, Jim DeWitt, Daniel Jew, Margie Farrell, Jenine Murch, Jim Cummings, Bonnie Pletheram, Ethan Lavan. 2)Bass ET. 3) ¿Dos Bruño? 4) Graduating seniors sleep easy. 5) SSSSuperfly, the man who was rejected by Nature. 6) South American Gothic. 7) Sure does. 8) Mom washes the elephant. 9) Juniors (left to right): Kent Cantwell, Mike Allweiss, Tracy Furutani, Jim Mayhew, Peter Siracusa, Charles Cuny, Katrin Rodriguez, Mark Purtill, Barb Turpin, Scott Gordon, Eugene Hu.



Airily comported, together, but not in unison: "We're interested in the Matter of Gravity." Writing on the wall.

Having writ from a cool couch arose a man draped with long hair and purple unmentionables. No sheet. An introduction: Julius Caesar the Elder, unapologetic one of two, the second unCSERtainly principled, a third only allusive. Joe Cairo. Jim Cassionova. Stars of Bedlam.

Persuasiou: "Try climbing the stairway to Seven." Upper and lower, like classes and cases. Comings and goings up in the world. Weight up.

Two boys wandered up past Clue W to see the Wall of Science. W for wonder. Exit left to the Funway. Two boys blind with neoscience read the writing between lines and massed much mirrored inner septum. Sknowblind. Kindersentient. Blanc-

minded. Two boys gravely mannered left the while of nonsense but did not exit left. Returned proper, correct, gravitating down the staircase past Clue W. W for influence.

What's it all mean, do you think?"
I don't know. I don't know." Which was a quaint little uncertainty,
 but he was bemused by presumption.

Two boys strolled back into the courtroom past a reclining jury and directed their gazes to follow the tall trunk of a palm tree rising roseless beside the unsigned whitewalls of a parking lot to be. Opening on a window wanting a bicycle. Hanging before a couch unsuspended and not


1) Would you trust this man with your money? 2) Sophomores (left to right, top to bottom): Jim Cser, Don Buchholtz, Alan Daughton, Brian Mapes, John Morrison, Cathy Ifune, Lisa Payne, Ken Hooper, Dave Weisman, Cheryl Klipp, Dave Lee. 3) Tim Brandon teases long skinny fish. 4) What? Me worry? 5) ¡Viva Cser! 6) Servomation - "Quantite ad nauseum." 7) Joel Cool 8) Sure Does 9)Tom Tucker prepares to do a swan dive into a teacup of lime jello. 10) Freshmen (left to right, back to front) James Mayhugh, Everett Howe, Larry Doan, Rudy Hofmeister, John Schlarb, Joel Harris, Cora Chow, Mike Roberts, Milagros Montalvo, Marguerite Payne, Ed Ussery, Jeff Keller, David Gillespie, Kevin Hernandez, Felice Borisy, Tim Allen, John Lindgren, Joel Seely, Steve Gomez, Tom Tucker, Jennifer Jerlstrom.


2) House Flakes and Swelled Heads (l to $r$, back to front): DeDe Draper, Mira Todorovich, Kirk Kanzelberger, Paul Ste. Marie, Elliot Hohri, Mark Tinkle, Bill Callahan, Irene Replogle, Joe Decker, Jennifer Jerlstrom, Dean Shibata, Tom Tucker, Teresa Solberg. 2) What the fuck? 3) Long distance-the next best thing to being there. 4) "Lay on McHayes and damned be he that first cries, 'I quit!""


swinging. Fluttering against a sheer face, pinned by the sharp thwack of a misnamed orb. Strop. Whet. Strobe. Whirled.

The wind chaot two boys unenlightened. Swirled them as eyeballs alone right by the Breath of God (frame an earlie phonograph) out of the House of couches and meanings. Vox Dei.

Later one boy reappeared, head spinning, and accepted with gravity champagne, by the quirks of choice to become a Darb. A thing remarkable. Expertinent. Innocent. Incorruptible. Inflammable. In limmine.

## ¡Viva San Semilla!



Extreme attraction, strange and mutual.
I was he. He was become me.
(blasphemy: n. 1. irreverence toward something considered sacred or inviolable; 2. the act of claiming the attributes of deity. /The quirks of choice become benzyl blasphemies./ see sins unmentionable.)

## Psych I.

## Sick and Dumb

Inks. They can kill you. I dream a patternedly seriouscurious dream. A petrochimerical dream. I stand where the rain falls hardest in a courtyard deserted save one soulparticle. A rock. A church. A cherry elementary. Leaking. I watch swelling round droplets of blood fall in easy leisure to spatter on dusty courtyard bricks. click...smack...slick...crack. Tiny Millikans drifting down in answer to the precedents of one force over another. Wrists slit. Wide doe eyes stare behind dark green glasses like deep sea water, and I stare too. Drops splash and crackle and paint our toes pop...cop...coppery red. Patter. Pitter. Pitter. Two arms swing up, sending scarlet sparks arcing in morning light, and two hands almost cradleclutch short, black hair. Lazy droplets become a rushing, turbidulent current which streams down raised forearms into bent elbows and pours to the bricks with a muffled roar. And gravity pools. Breath held too long surges from a stained throat. A scream. An ululating shriek echoes from high white walls. Vox et praeterea nihil. A hand bell on the far side of the crimson wheelchair rings in anger


Laceration, assholes. A scream. Razor-sharp as the thin whistling whine of snow across the crest of a wind-whipped Antarctic drift.

I grope slipperily for wrists disolving in red miasma, and I hold. The shriek loses breath and slowly fades to a querulous whimper. Red flood slows, paling to a thinly rubicund trickle. Direct pressure. Forced aid. Scream stops, stream dies. In silence, two eyes stare at me behind emerald stained glass. Eyelashes flutter once.

Then a head tears free of a neck in complete peace and spins three times end over end, spraying the air with fine red mist. Sticky hands hold and then slip from my grasp, and a body crumples. Suffering alluviated.

The death of a proton.



Psych II.

## Surd Term

Couches, cats, camels, chaos. C. C for close tolerance. C for csertainty. C for celeritas. C for conscience. Conscience chaot. DEI, Incorporeated. Everlasting errorfact, and altar egos: everpetrockirsche-body of one, blood of the other. Pizzapanther, paternoster, patternseer-accuser, petersnostrils. Regularly beat Plato. That's what computers are all about. Numb births. Aerial lords. Light Ardor. Starchostic BARBs and green elf-reverence. Airvet. Airventoolate the sceutsiweuts of TURPINtime from twenty-two. Allforabit. Big boolean boobs-yessirknow? Eh? MAYWHO? Brain/Mind Buggering. Oh, THTUART. Ich habe Goethe nicht gelesen. Nicht gut. Goodnight. And he left with SEG written all over his. Are we not men? Lemurs? Lemmings? We are Darbo. Keenly sentential. House of weirds...words...wireds....Wits left. I caught conscience thinly. And I lie. I lie. We have our daze in court, our days, our dais. Our entire alphabet, from levo to dextro. Vitamins and friedamines. Our cats, our fractal cats. And the new, improved present BABS TURBINE. She's a kinetic taco, tomtaco. Calmly censured mornings. BRUTAL SAMSaran lightning bugs and merrily earnest firebugs. But richacted naturally an astrophysicist. Poggonestly.


Ahforget the way the words end. Evephant remembers. TA...B. How are things out there? Here everythink is onoffmottopoetic. I don't know why. Do you? Why not?

Psych III. You're out.

[^0]



Before I leave I'd like to let you know...that the love that's in your heart wasn't put there to stay... I want you to know that love ain't real love until you give it away...you gotta share it with somebody...try to spread a little bit if you can...and enjoy your life 'cause it's the only one you got...live it with gusto...
ROCK YOUR ASS OFF!!!
-Sam


## $2 \mathrm{k}<\mathrm{K} \leqslant \mathrm{t} \leqslant$




above Couldn't miss. Right?
left You should have seen the one that got away
below Some gong keepers will do anything to avoid being showered.



Come on in. The water's fine.
WRONG


All right, guys. Who stole my rubber ducky?
above Dan Dickerson demonstrates another new toy.
right Scurve waiters: back Andy Wolf, Saxy Workman, Charles Barrett, Bill Banks, Andre Burgoyne. center Pete Alfke, George Karas (head waiter), Brenda Roder. front Charles DeBardeleben, Peter Konopka, Minami Yoda.


## halloween and the bad taste party

Did you ever notice how all of the major social events of Ricketts House involve dressing up and acting weird: Halloween, The Bad Taste Party, Interhouse and Apache?

Halloween clockwise from the left top: Santosh Krishnan in typical pose, Dan Dickerson in his natural habitat, Cindy Morss and a backwards Bongo.

Bad Taste Party top right: Bob Mackey and Fritz Nord-by-look at those legs.


## Inter house



This year's Interhouse once again was selected for minimum work. So we simulated one of the sleazier neighborhoods of Hollywood, complete with adult theatre, prostitutes and real Tommy's chili.
left Minami Yoda and Andre Burgoyne.
right Bob Mackey and Janet Tamada.
censored for obvious reasons The actual Tommy's chili and the late show and the Mann's Chinese Theater.




## and other dances




## $\cap u$



(1)
and house
meetings

$\infty$


.

clockwise from right top:

## Oitch


-Gary Mockli's Premed Stack.
-Richard Miles finds in his room (surprise, surprise) a full scale model of Gregor Samsa (after the apple hit him).
-A very small part of Derek's bribe.
-Oliver does his bit of useless tinkering outside of Richard Miles' door.
-Peter and Peter-Pete re-enact the balcony scene from Romeo and Juliet (complete with tennis shoes).
-The window to Dave Oare's record-breaking brute force stack is secure. It takes until 2:45 p.m. to get in through the ceiling!

## Not Pictured:

-Eight people belching outside of Jim Merino's door.
-The senior breakfast on the fake Ditchday.
-Julie Anderson's killer rabbits.
-Russell's 100 leftover bagels.

-Saxy eats pie.
Oay


# B R a k $\epsilon$ 



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## I <br> 1




## scurves

Seniors left: back Gary Tanigawa, Dave Oare. on the wall Justine Armantrout, Barry Lippey, Russell Almond, Charles DeBardeleben, Dan Dickerson, Gary Mockli, Eric Sinn, Jennine Murch, Sam Sjogren. climbing Brian Leahy, Dave Schultz. not pictured Jim Cummings, Mike Doty, Jim Scoby. Prexy Jim Merino, Julie Anderson, Derek Straub, Richard Miles.

Sophomores below: on the pot Brian Metscher, Bob Mackey, Sylvia Luedeking, Steve Brown. standing Andy Wolf, Misha Mahowald, John Hartzberg, Andre Burgoyne, Tom Bulgerin, Minami Yoda, Charles Barrett, Brenda Roder. in the pot Bill Sharpe, Eloise King, Kurt Anderson, George Yoshinaka, Serge Granik, Lawrence Anthony, Tom Foley, Stan Kuo, Jay Raemsh, Katrin Rodriguez, Dede Draper, Teresa Solberg

Cand Table below right: Clark Brooks, Ken Shrum, Alan Dellamore, Tim Pearson.



clockwise from lower left:
Tracy "The Qat" Furutani
Bob Bolender
Joy Watanabe
Kathy Doughty
Bill Sharpe and Eloise King
Mark Lindsay
Derek and Julie Straub
Tim and Octavius RA
Mike Doty
Russell Almond



Editors:

Photos:
Darkroom Help:

clockwise from left top: Therem, Ricketts' Ex-Comm, Mildred, Crud, Octavius, Halley, Chubs. center Jerry and Perkey.


## the Menagerie







\section*{| $-91 i$ |
| :---: |
| SPORT | calendar}



The months of your Metric ${ }^{\oplus}$ calendar are named after famous scientists. (Note: the month of $\mathbf{Q}$ is not named after a famous scientist). Each month has as many weeks (of six days) as it has letters in its name. The year begins on the second of November (old-style) with the first of Tesla.

The six days of the week are named, in order, atto-, exa-, gigi-, nano-, pico-, and tera-. Thus the first of Tesla is also, and more commonly, refered to as the first attoTesla. Note that both tera- and atto- are holidays, equivalent to the old-fashioned Saturday and Sunday.

The month of $Q$ poses a problem; in years that aren't leap years, one day must be omitted. The day selected is exa-, for obvious reasons. As an added bonus, your Metric ${ }^{\circledR}$ calendar has two (2) months of $\mathbf{Q}$. This is not a mistake: one is for use in leap years, and one is for use in other years. (The one without an exaQ is for nonleap years.)

## -91i Caltech Football Team

Record: Won 3, Lost 4, Tied 1, Standing: none.

Tesla

| atto | exa | giga | nano | pico | tera |
| :--- | :--- | :--- | :--- | :--- | :--- |
| 1 | 2 | 3 | 4 | 5 | 6 |
| Celendar Dow | 8 | 9 | 10 | 11 | 12 |
| 13 | 14 | 15 | 16 | 17 | 18 |
| 19 | 20 | 21 | 22 | 23 | 24 |
| 25 | 26 | 27 | 28 | 29 | 30 |

## -91i Caltech Water Polo Team

Record: Won 9, Lost 14, Standing: none. SCIAC Honors: Chris McKinnon, Reed Burkhart, Bill Polson.


Top Row (left to right): Chris McKinnon, Coach Clint Dodd, Bjorn Matthias, Dave
Watkins.
Middle Row: Fred Ferrante, Bob Golden, Reed Burkhart, Dave Huff, Hans Hermans,
Brian Suggs.
Kneeling: Tory Lawton, Bill Polson, Jim Labrenz, Steve Chin, Greg Schenter, Steve
Loyola.
Not Pictured: Stan Berman, Ron Franz, Eric Grannan, Paul Graven, Alan Murray,
Stuart Ray, Paul Shaffer, Brent Stuart, Myles Sussman.

## -91i Caltech Tour Guides Team



Top Row (left to right): Lawrence Anthony, Mark Lindsay, Mark Marley, Marc Buffet,
Bottom Row: Stan Kuo, Karla Peterson, George Pitt, Head Guide Russell Almond.


## -91i Caltech Cross-Country Team

Record: Won 4, Lost 6, Standing: fifth. NAIA Honors: Karen Close.


Back Row (left to right): Joy Watanabe, Jennifer Haase, Karen Close, Marit Jentoft-Nilsen, Coach

$$
\begin{aligned}
& \text { Front Row: Mignon Belongie, Diane Creveling. } \\
& \text { Not Pictured: Janice Pata, Betsy Arnold, Lisa } \\
& \text { Skrumeda. }
\end{aligned}
$$

Women

Record: Won 6, Lost 4, Standing: third. SCIAC Honors: Vince Cammarata, Karl Clausing.
Men


Back Row (left to right): Matt Penn, Robert Kelly, Steve Stahl, Karl Clausing, Nathan Inada, Coach Leroy Neal.

Front Row: Warren Goda, Terry Barr, Vince Cammarata, Robert Dow. Toh.
Hertz

| atto | exa | giga | nano | pico | tera |
| :--- | :--- | :--- | :--- | :--- | :--- |
| 1 | 2 | 3 | 4 | 5 | 6 |
| 7 | 8 | 9 | 10 | 11 | 12 |
| 13 | 14 | 15 | 16 | 17 | 18 |
| 19 | 20 | 21 | 22 | 23 | 24 |
| 25 | 26 | 27 | 28 | 29 | 30 |

## -91i Caltech Men's Soccer Team

Record: Won 4, Lost 9, Tied 3, Standing: last. SCIAC Honors: Peter Orr.


[^1]Newton

| atto | exa | giga | nano | pico | tera |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 1 | 2 | 3 | 4 | 5 | 6 |
| 7 | 8 | 9 | 10 | 11 | 12 |
|  | Abe Lincldss <br> Brithday <br> and | 15 | 16 | 17 | 18 |
| 13 | 14 |  |  |  |  |
| 19 | 20 | 21 | 22 | 23 | 24 |
| 25 | 26 | 27 | 28 | 29 | 30 |
| 31 | 32 | 33 | 34 | 35 | 36 |

## -91i Caltech Basketball Team

Record: Won 1, Lost 22, Standing: last. NAIA Honors: Stewart Peebles.

Front Row (left to right): Wen Teh Chang,
George Pitt.
Back Row: Asst. Coach James Boone, John
Krehbiel, David Werntz, Kent Noble, Terrence
Barr.
Not Pictured: Drew Lindberg, Se Jung Shin,
Rodney Van Meter.

Varsity

Record: Won 0, Lost 14, Standing: none.

Junior Varsity



Front Row (left to right): Kevin Hughes, Chris
Kyriakakis.
Back Row: Chris Cotterel, David Werntz,
Stewart Peebles, Bob Golden, Jim Helgren, Head Coach Mike Poizner.

Not Pictured: Doug Evans, Tom Heer, Anthony Capowski, Jeff Lester, Stuart Ray.


## -91i Caltech Fencing Team

Record: Foil 6-3, Sabre 2-7, Epee 0-9, Women's foil 1-8, Standing: none.

Left to Right: George Clovis \& Michael Clovis, Peter Konopka, Maclen Marvit, Phyllis
Li, Kenneth Bell, Lee Sunderlin, Scott Grossman, Leif Bennett, Kathleen Sheedy, Karla
Peterson, Amy Yoshida.
Not Pictured (left to right): Kurt Anderson, James Bell, Daniel Briggs, Chien-Wei Han, Kenneth Hooper, John Quackenbush, Diana Foss, Barbara Turpin.
Joule

| atto | exa | giga | nano | pico | tera |
| :--- | :--- | :--- | :--- | :--- | :--- |
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| 7 | 8 | 9 | 10 | 11 | 12 |
| 13 | 14 | 15 | 16 | 17 | 18 |
| 19 | 20 | 21 | 22 | 23 | 24 |
| 25 | 26 | 27 | 28 | 29 | 30 |

## -91i Caltech Women's Volleyball Team


Top Row (left to right): Ann Rosenthal, Lucy France, Lynn Hildemann, Chris Tiller,
aathy Shapiro, Sandra Loh, Coach Yela Luzar.
Bottom Row: Lynmarie Thompson, Julie Kornfield, Leslie Lippard, Eliza Sutton.


## -91i Caltech Swimming Team

Record: Won 0, Lost 8, Standing: none.

Coulomb

| atto | exa | giga | nano | pico | tera |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 1 | 2 | 3 | 4 | 5 | 6 |
| 7 | 8 | 9 | 10 | 11 | 12 |
| 13 | 14 | 15 | 16 | 17 | 18 |
| 19 | 20 | 21 | 22 | 23 | 24 |
| 25 | 26 | 27 | 28 | 29 | 30 |
| 31 | 32 | 33 | 34 | 35 | 36 |
| 37 | 38 | 39 | 40 | 41 | 42 |

## -91i Caltech Golf Team

Record: Won 0, Lost 14, Standing: last.


Kneeling: Mark Pitt, Paul Johnson, Jim
Scoby.

## -91i Caltech Tennis Team



Top Row (left to right): Margaret Carter, Lisa Cummings, Joy Watanabe, Tammy Choy.

Middle Row: Coach Mike Jackson, Jon
Parker, Ron Francis, Harry Mousmoles, Ryoji Watanabe, Rajiv Sahney.

Kneeling: Yosufi Tybkhan, Sanjay Agrawal, Ned Wingreen, Hidecki Garren, Ashok Krishnamoorthy, Roy Hashimoto.

Not pictured: Lucy France, Gene Pottenger,
Cathy Shapiro.

| Volt |  |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| atto | exa | giga | nano | pico | tera |  |
| 1 | 2 | 3 | 4 | 5 | 6 |  |
| 7 | 8 | 9 | 10 | 11 | 12 |  |
| 13 | 14 | 15 | 16 | 17 | 18 |  |
| 19 | 20 | 21 | 22 | 23 | 24 |  |

## -91i Caltech Track Team



Top Row (left to right): Coach Leroy Neal,
Brian Burk, David Gallup, Mark Holst, Brian Brian Burk, David Gallup, Mark Holst, Brian
McLain, David Chavez, Tim Magee, Steve Baxter, Steve Knowles, Karen Close, Karl Clausing, Diane Creveling.

[^2]
## -91i Caltech Women's Soccer Team

Record: Won 2, Lost 8, Tied 1.


Top Row (left to right): Susan Hunt, Julia Lester, Lynn Hildemann, Wendy Rasmussen, Sandra Loh, Chris Tiller, Lynmarie Thompson, Cinsy McCalley, Leslie Lippard, Coach Larry Tatone.

Bottom Row: Mira Todorovich, Elizabeth Newman, Julie Kornfield, Nancy Krehbiel, Pam DeMoor, Jennifer Haase.

Couched: Ann Rosenthal.
Not pictured: Alison Blake, Connie Senor.
PDADH

| atto | exa | giga | nano | pico | tera |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 1 | 2 | 3 | 4 | 5 | 6 |
| 7 | 8 | 9 | 10 | 11 | 12 |
| 13 | 14 | 15 | 16 | 17 | 18 |
| 19 | 20 | 21 | 22 | 23 | 24 |
| 25 | 26 | 27 | 28 | 29 | 30 |

## -91i Caltech Wrestling Team

Record: Won 2, Lost 13, Standing: fifth place. SCIAC Honors: Brian Lau.

Left to right: Bob Shoomaker, Brian Lau, Mike Ammon, Louis Aronson, Matt Compton,
Paul Filmer, Head Coach Lin Parker.


## -91i Caltech Baseball Team



[^3]Weber

| atto | exa | giga | nano | pico | tera |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 1 | 2 | 3 | 4 | 5 | 6 |
| 7 | 8 | 9 | 10 | 11 | 12 |
|  | Columbus Day | 15 | 16 | 17 | 18 |
| 13 | 14 | 15 |  |  |  |
| 19 | 20 | 21 | 22 | 23 | 24 |
| 25 | 26 | 27 | 28 | 29 | 30 |
|  |  |  |  |  |  |




## Jam Room <br> 




Guilar: A. I. Capowski. Manio Fajardo. Jracy Furutani, Deff Lester, Bob "Bruno" Lewis, Dean Richter. Bruce Sams. Dohn Schlarb. Dave Lee, Charles "Guitar George" Cuny.

Keyboards: Glyn Anderson. Dave Ftayes, Gesine Lohr.
Percussion: Bill Fark, FHarkison Leong. Mark Ross. Bill Banks. Barb Jurpin. David "Cakes" Younge. Mike Rigler.

Bass: Russell Almond. Clark Brooks. Andy Duncan. Anne Flemmann, Doel Ftartis.

Saxophone: FKen Shrum, Bob "Blob"' Bolender.
Vocals: Chris Finch.


Eingineered by: Steve Quesnel. Bonnie Petheram.
Tholos: Russell "Can't pick a good font if it hit him in the face" Almond, Gail Manning.

Shecial Thanks: Russell Almond (OSE.). Jim Cummings. Mario Fajardo, Anne Herrmann (OSE.). Detf Lesten (A.OSE.). Gesine Lohn (sec.), Bruce Sams.



## Caltech Table Tennis Club



## Caltech Cricket <br> Caltech Cricket

## Club

Co-presidents: Ian Anderson Anrivan Ghosh

The club was revived and organized this year
after a lapse of several years. After rigorous
practice for weeks, the team went around winn-
ing frequently against local clubs. The glorious
days when the Beavers went about beating the
Bruins will be back soon!
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ing frequently against local clubs. The glorious
days when the Beavers went about beating the
Bruins will be back soon! Bruins will be back soon!


# ANTIGONE BY SOPHOCIES 



At 2PM, Saturday and Sunday, October 16th, 17th, 23rd and 24th. At Braun Court, the outdoor forum on Caltech campus, east of Braun labs at San Pasqual and Wilson.



# Der Gestiefelte Kater PUSS IN BOOTS 



## LANDSCAPE



## TWO ONE - ACT PLAYS BY HAROLD PINTER





Ninem fow Need \& Place Amey From Derkmesso. LOOく ¿O ErE JOח


Caltech Amateur Radio Club

This past year has been a very interesting one for our club. Pictured here is our club president (Sam Sjogren -- WB6RJH) risking life and limb to repair wind damage to the club's antennas on Winnett. Our station saw a good deal of activity this past year, with participation in numerous contests (ARRL International DX Phone Contest, Phone Sweepstakes, QSO Party, and the Midnite Special). Through a very generous donation by an alumnus of a new linear amplifier, our low-band station is now state-of-the-art. On the public service side, preliminary earthquake preparedness measures to insure communications with the ourside world were discussed with parents from Polytechnic Highschool.

# CLAGS came out of the closet <br> - 1 



ech enters the 80s


## Caltech Organization for Weddings



My life's in jeopardy, murdered in cold blood Is what I'm gonna be I ain't been home since Friday night And now my wife is comin' after me Get me p'lice protection Gonna find someone to look after number one Give me a bodyguard
Or a blackbelt judo expert with a machine gun Gonna buy a tank and an aeroplane When she catches up with me Won't be no time to explain She thinks I've been with another woman And that's enough to drive her half insane

- Gohn Entwistle




## Chairperson Julia Lester

The Organization for Women at Caltech was founded in 1979, and represents students, staff and faculty. Our aim is to improve the quality of life for all women on campus.

Fall Extravaganza



## Caltech Jujitsu Kai

Sitting (left to right): Cathy Sheedy, Leif Bennett, Mark Meyer, Andy Liu.
Standing: Maclen Marvit, Steve Roy, Dan Briggs, James Bell, Wen Jin Meng.


The team photo, taken outside the gym, is:

## The Caltech Men's Volleyball Club

Starting with the bottom left is Austin, Mike Becken, Lei Yu, Chris Snyder and Rod Morrison. Prakash Kasiraj is kneeling in front of the tree. Second row: Sandy Frey (coach), Chad Edwards, John Tanner, Brian Wilson and Ted Russell. In back are Andy Berkin and Mark McGuinness.


## Caltech Jazz Band

PAMO AUDITORIUM CONGERT
MAY 5,1983

CALTEGH-OCCIDENTAL WIND ENSEMBIE
CALTECH JAZZ BAND

| CLARINETS | CORNETS | TRUMPETS |
| :---: | :---: | :---: |
| Frank Dittman | Allan van Assolt |  |
| Alex Grant | ${ }_{\text {alan }}$ | John Brugman, lead |
| Mary Ann Hoffman | Ray Burkhart | Allan van Asselt |
| Greg Jordan | Chung Chan | Carl Schultheisz |
| Conrad Josias* | Carl Schultheisz | Kale Skinsnes |
| Jeff Kogen <br> Arl Lapin | Nancy W1schhusen |  |
| John Morrison |  |  |
| Mark Pltt David Trowbridge | TRUMETS | RHYTMM |
| Trudi Wreede | Albert Coleman Duane Marstellor Randy Tivens* | Les Deutsch, plano Evan Cromwell, plano David Zobel, bass Mike Rigler, drums Steve Thomas, drums |
| BASS CLARINET |  |  |
| Tom Drouet | PRENCH HORNS |  |
| Flutes | Jean Eldredge |  |
|  | Don Lo |  |
| Jean-Pierre Bardet | S1d Heyman |  |
| Jeanne Callahan | Nancy Swick |  |
| Mats Nordahl |  |  |
| Perry James Robertson | Trombones | SAXOPHONES |
| Tom Skelton* |  |  |
| Ann Stanley Brown | M1ke Gorder** | Dwight Garcla, lead alto |
| Theron Stanford | George Pitt III* | Bob Bolender, alto sax II Joe Wirtley, alto sax II |
|  | Mark H. McAdon |  |
| PICCOLD | Carl Kircher | Reed Burkhart, tenor I David Frost, tenor II Al Goldsmith, baritone |
|  | Greg Ojakangas |  |
| Julie Paque |  |  |
|  | BARITONES |  |
| OBOES | Paul Kienker* <br> TROMBONES |  |
| Joff Nutting |  |  |  |
| Harry Hardy |  | Greg 0jakangas, lead <br> James Blinn <br> Jennlfer Haase <br> Jonathan Happe |
|  | TUPAS |  |
| Bassoon |  |  |
| Russell Almond |  |  |  |
| Rusbell Almond | Mark Cohen Eric Moore |  |
| SAXOPHONES |  |  |
| David Love (alto I) | PERCUSSION |  |
| Dulght Garcia (alto II) | Steve Nixon Ed Rhodes Steve Thomas |  |
| Al Goldamith (tenor) |  |  |  |
| Reed Burkhart (baritone) |  |  |  |
| * principel |  |  |
| *co-principal |  |  |
| ***1lurarian and equipaent manager |  |  |

## DAVID SHIFRIN

DAVID SHIFRIN is a musician on the move and is one of America's buaiest clarinetists. During the 1982-83 season, he is perforsing as a recitalist, chamber nusician, or soloist in literally every corner of the United States. He is also Professor of Clarinet at the University of Southern Californ1a, and nusic director of the highly-acclained Chamber Music Northwest sumer festival in
Portland, Oregon.

Wile a student at the Curtis Institute of Music, David won the principal clarinet position in Stokowaki's American Symphony Orchestra He later Joined the Juilliard Ensemble, a contemporary music group founded by Luciano Berio and directed by Dennis Russell Davies.
DAVID has played principal olarinet with the American Symphony Orchestra, Honolulu Symphony Orchestra, Cleveland Orchestra, and is presently principal clarinet with the Los Angeles Chamber Orchestra,

David has recorded with the Cleveland Orchestra, American Symphony, Los Angeles Chamber Orchestra, and has numerous solo recordings. Later this yoar, he will be performing the Brahms Clarinet Quintet with the Guarneri String Quartet.


# and Wind Ensemble 

| 4th annual |  |
| :---: | :---: |
| CALTECH- | aturing the <br> JAZZ BAND <br> and the <br> ENTAL WIND ENSEMBLE <br> by William Bing |
|  | Guest Artist <br> SHIFRIN <br> larinet |
|  | ars through the courtesy Musical Instruments |
| May 5, 8:00 pm <br> May 7, 8:15 pm | Ramo Audiltorium, Caltech Herrlck Chapel, Occldental College |



# THE CALTECH GLEE CLUBS 

## DONALD CALDWELL Conductor

MONICA BOWN
Assistant Conductor
WENDY CALDWELL and VINCENT POWERS Accompanists



John Behr
Paul Berglund Ross Berteig John Bruckner Jerry Burch Francis Celii Michael Chwe Miles Collins Drew Cushman Brian Davison Frank Dionisio Kurt Eakle Dean Elzinga Peter Felker Erik Fernandez Donald Fossgreen Concetto Geremia
James Hafner

Philip Hookham Jung Im Howell Johnson Peter Jones
Daniel Kegel
Ray Lischner
Carl Murray
Michael Oliver
Apoorva Patel
Michael Pettersen
Cornelius Phillips
Lee Reavis
Don Silvert
Ichiro Sugioka
Marc Van Rossum
Frederick Wieland
Min-Su Yun

MEN'S GLEE CLUB

Ellen Bus
Kim Cao
Jean Chang
Shevaun Duiker
Gladys Engen
Rita Gitik
Cathy Ifune
Atsuko Kirschvink Cheryl Klipp Michelle Miller Jeanne Mueller

Lisa Payne Jeanne Reinelt Ruth Ridenour Anita Ruth Susan Schiffer Patricia Scott Marianne Veith Karen White Laura Wilson Miriam Zucker

## WOMEN'S GLEE CLUB



# Caltech Lawn Curling Club 

Rustle Almond, Coach
Paul Berglund, Team Captain Also starring Charles Cuny and Jim Cser


## tieALTECHY



# PROGRAMS 



# sPORTS 

## DAY




## NOON

 CONCERTS

## They <br> FomTecher toEn Adventures in Venture iursday. May 19 Clubre om the $y$ : <br> <br> Whose Spac <br> <br> Whose Spac Is It Any Is It Any EHsell L. Scheickgatis speaking or

Jim Fruchter


## UON Lau hursday Th <br> 




## EDITORS

Glen Crawford Anirvan Ghosh
Third (World, woo! -ed) term saw TOTEM return from the dead. TOTEM, Caltech's 'literary' magazine, was published after a lapse of several years and featured prose, poetry, and artwork. Highlights include three faculty contributions and a prizewinning prosepiece entitled "On the dissection of a Techer's brain" by freshman Warren Goda.

## totem and <br> little t





The California Tech

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The Challenge


We're not gonna take it
Never had and never will
Don't want no religion
And as far as we can tell
We re not gonna take you
Gonna shake you
, Gonna rape you
Let's forget you better. . .still
Right behind you, I see the millions
On you, I see the glory
From you, I get opinions
From you, I get the story
-Peter Townshend


Photographers - Russell Almond, Praveen Asthana, Roger Fong, Ron Gidseg, Kirk Haselton, Gail Manning, Ed Miles, Sergay Mnatzakanian, Michael Terepka, Barbara Turpin, Sing Wong, Michael Takayama.

Head Photographer Roger Fong: I like to shoot people.



Don't know why I feel so bad Is it the weather
Or am I going mad?
Don't know why I feel this way
I don't know whether I'm coming
Or I'm going
Can't cover up
'Cause it's obviously showing It's a state of confusion

Now I awake in a cold, cold sweat Am I overdrawn,
Am I going in debt?
It gets worse
The older that you get
This state of confusion I'm in This state of confusion I'm in
-Ray Davies


Chairman of the Board
Tracy Furutani
President
Praveen Asthana
Director of Production
Mark Purtill
Assistant
Charles Cuny

Well she might be the talk of high society
She's prob'ly got a lousy personality She might be an heiress to Rockafeller She might be a waitress or a bank teller She makes Venus de Milo look like she's got no style She makes Sheena of the Jungle look meek and mild -Bruce Springsteen


## CHEERLEADERS





Surfaces $\rightarrow$ the 3-d menisinal ataly
A vector-valued function of 2 varibble




"HE HAD A WIFE AND PIGZ IN MONTEREY JACK WENT OUT FOR CHEESE AND HE NEVER CAME BACK"

- BALLAD OF OINK ZEGGPOLD, BY B. SPRINGSWINE

THE ORIGIN OF OINK Zeoropold





## CREDITS

Division Pages:
Events: Ch 21 Seniors: Art 101 Burgland: Ant Houses: Ma Sports: An Clubs \& One GS R: Ma 2

Spoons
The Ph Siren plat
Ca. ch Service League




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Layout: Charmesto
Inspiration: Th Meishing
Sunne

Confusion: Paul 'Fi ger Prince' Berglund A11 artwork: Mark Purtill

Charles Cuny
Tracy Furutani

Credit dentistry provided by: BTIA

Tonight down here in Linden Town I watch There's a beautiful full moon rising above

the cars ruskin' by home from the mill the Mansion on the Fill. -Bruce Springsteen


[^0]:    -Tom Tucker

[^1]:    Standing (left to right): Coach Cameron, Gerald Zeininger, Steve Havstad, Ed Felten, Ned Wingreen, Robert Franciosi, Kaveh Taleghani, Nick Gross, Mike Hisey, Doug Shors, Coach McCallan.

    Kneeling: Tze Kin Ip, Mark Stefanich, Steve Jones, Scott Karlin, Stefan Feuerabendt,
    John Krehbiel, Young Lee.
    Sitting: Peter Orr, Manuel Acevedo, Anrivian Ghosh, Greg Haussmann, Luis Monsalve, Bob Mostert, Russell Quong.

[^2]:    Bottom Row: Matt Penn, Kaveh Taleghani, Robert Dow, Steve Stahl, Scott Bloom, Robert Kelly, Vince Cammarata.

[^3]:    Top Row (left to right): Coach John D'Auria, Robert Mostert, Phil Scott, Jim Hamrick,
    Ed Casey, Armand Capote, Head Coach Scott Laurence.
    Bottom Row: Chris Burak, Pat Harrison, Alan Marumoto, Steve Havstad, Kurt Lemke, Brandon Mymudes.

    Not pictured: Alan Daughton, Martin Hunt, Jon Quilliam, Marc Schuyler, Doug Shors.

