



photo by Anoop Sinha

Lord Muis Dreamswinger tunes a hammer dulcimer with ping-pong ball catapults in the foreground, at last Saturday's Fall Coronation in the Court of Man sponsored by the Caltech Medieval Renaissance Society.

Dr. Joseph Kirschvink Discusses Biomineralization of Magnetite

Chris Echols

Professor Joseph Kirschvink, recently promoted to full professor, is a member of the Division of Geology and Planetary Science and a professor of geobiology. He did his undergraduate studies here at Caltech, receiving a B.S. in biology and an M.S. in geology. He received his Ph.D. from Princeton in 1979.

Echols: When did you come to Caltech?

Kirschvink: I was an undergraduate between '71 and '75. I originally intended to be a double major in geology and biology....I later realized I could get a bachelor's in one and a master's in the other.

E: Where did you go from there?

K: Then I spent a year as a Watson fellow in Australia....Then I went to Princeton.

E: To do your Ph.D. work?

K: Yes.

E: Then you came here?

K: They hired me back '81.

E: Your secretary told me that you have recently been promoted to full professor.

K: Yes. But I'm not sure what it means.

E: What does it mean?

K: I don't know. I think they put me on more committees or something. Other than that it seems to be about the same.

E: Do you teach here?

K: I'm supposed to. I love teaching. I was an undergraduate here. I just came back from Baja on a four day field trip

E: What were you looking for on this trip?

K: It was a Ge 105 trip—it's an introduction to geological time—Baja peninsula has got a beautiful sedimentary record of the Cretaceous, just before the Cretaceous-Tertiary boundary....It's a damn good field geology trip.

E: Could you tell me a little about magnetite biomineralization?

K: All of that work really originated with Caltech's emeritus professor of paleoecology, a guy by the name of Heinz Lowenstam, who was basically the Caltech paleontologist for many years. Well, one of them. He had discovered that magnetite was in the teeth of the chitin of small mollusks back in 1961. Back

when I was an undergraduate, split between geology and biology, I needed an advisor who knew something about biology—I got Heinz Lowenstam. He's the classic German absent minded professor. Heinz said "What are you doing in research?" Now that was before the SURF program. It turns out that Gene Shoemaker, the chairman at the time, had a need for undergraduate researchers in geology. He had a laboratory at Flagstaff, which was a rock magnetism laboratory. He did big field projects all over the southwest U.S. Being an Arizonan, I love that country. I ended up learning paleomagnetism. I spent my summers doing rock magnetism in the Colorado plateau. So I told this to Lowenstam and he said "Hmm. Magnetism. You might be interested in these teeth." And he showed me these chitin teeth. I think this was the end of my sophomore year. I was stunned. They were attracted to a magnet.

E: Teeth?

K: Teeth! Magnetic Teeth! I was hooked. In fact I ended up writing a paper with Heinz which was essentially a senior thesis. We did these dumb simple fun experiments. We were going to calculate how much magnetite was being thrown

continued on page 8

Administration, IHC Clash Over Interhouse Revival

Steven M. Sobelman

This year, like last year and the year before, an attempt was made to take steps towards bringing back Interhouse, the seven-house party that had traditionally happened a week or two after midterms until 1989, after which it was decided that Interhouse needed to be revised, to be suspended or to never happen again. The purposes of this article are to describe what Interhouse was, explain why it was cancelled, give a history of the efforts, of the current IHC in particular, to get it back in some form, and attempt to show why this year those efforts were unsuccessful.

When I was a frosh...

Interhouse used to be a fun, really big party, of which the entire Caltech community was proud. Members of the community from the President's office on down would come by to watch those nutty undergrads do whatever it was they were doing that year. Elaborate decorations were built, food was prepared, games, music and other entertain-

ment were organized, following a different theme in each house. The members of a house, most importantly the freshmen, would build things together, providing an opportunity both for the upperclassmen to get to know the freshmen and for the freshmen to form a bond with each other and with the upperclassmen. Finally, when all the preparations were done, everybody would go around to the other houses to see how their plans had turned out. I remember eating sushi in Ruddock, playing miniature golf in Dabney, and swimming in a flooded Ricketts courtyard particularly. A good time was had by all. (Playboy magazine once rated Interhouse one of the top ten college parties in the country!)

Since 1987, and possibly before, Interhouse has caused some grappling between the administration and the undergraduates. That year, someone was injured somewhat seriously testing out the traditional Page House ride. Rides were scaled down in that and future years. In 1988, problems began with people who had heard about Interhouse,

continued on page 10

California Generations Presents State's Heritage

Cara Stemen

Honoring the passing of the cultural torch from one generation to another within families and communities, California Generations presents the performing arts traditions of native, immigrant and ethnic groups who call California home. This historic tour comes to Beckman Auditorium tonight at 8pm.

Featured are Native Californians Julian Lang and Jimmie James from Karuk and Yoruk tribes of the Klamath River basin; afghan "dutar" (lute) master Aziz Herawi accompanied by his son Omar; "punta" music by Chatuye from the Caribbean coastal drumming traditions of Belize's Garifuna people; ancient Hawaiian hula and chant from Sissy Kaio and family; Hmong ritual dance by Master Ge Xiong and his students; the cowboy poetry of Jesse Smith; the Veracruz "jarocho" ensemble Los Pregoneros del Puerto; and traditional music and dance of Tibet by Chaksam-Pa, a trio of recently-arrived Tibetan immigrants.

This unique tour has been specially commissioned by California



photo courtesy of Caltech Public Relations

The Chaksam-Pa Tibetan Ensemble will perform as part of tonight's California Generations performance.

Presenters, a network of performing arts presenters on the West Coast, and is the first of its kind in the nation. It is made possible by support from the California Arts Council, the National Endowment for the Arts and the Lila Wallace Reader's Digest Fund.

Rush tickets are available for Caltech students for at \$7.50 and half-price tickets are available for Caltech faculty and staff. For more information call x4652.

Inside this week's

CALIFORNIA TECH

Letters	2
World News	3
Crime & Incident Beat	3
Bridge Without Sam	4
MOCA Exhibit	4
IHC Minutes	6
Y News	6
ASCIT Minutes	7
The Practical Bohemian	10
Cross Country	11
What Goes On	12

Letters

Page 2

IHC
Minutes
Return

Page 2

World
News

Page 2

LETTERS

Response to
A Man For
All Seasons

To the editors,

We are astonished and offended to discover a baseless attack on the Catholic faith in Mr. Hogg's review of *A Man For All Seasons* (Nov. 6 issue of *The California Tech*).

Mr. Hogg made a vague reference to the "hypocrisy of Catholicism" and portrayed the play as "... a demonstration of the absurdity of acting precisely on the basis of Catholic values." He arrived at this unfounded conclusion by ignoring "... the purity of Sir Thomas' intentions." Rather than an indictment of Sir Thomas' "naïveté", this excellent play celebrates and honors his constancy in adhering to the principles of his Catholic faith.

By these unjustified attacks, Mr. Hogg has done a disservice to Catholic as well as non-Catholic members of the Caltech Community. It is strange that he is apparently unaware of the many Catholic charities staffed by ordinary men and women "... acting precisely on the basis of [their] Catholic values." Recently, five American Catholic nuns were murdered in war-torn Liberia. They had fled Liberia in the wake of civil war but, urged by their unstinting faith and "... acting precisely on the basis of Catholic values", they returned to serve the people who desperately needed them. Should we admire these nuns for their courage and humanity in reaching beyond the confines of "Me first!", or should we deride them as naïve fools who gave their lives for naught? Their heroism and sacrifice, like Saint Thomas', inspire all of us.

Mr. Hogg is of course entitled to his opinion. It would have been better, however, if he had adhered to his declared intention to "... only permit [himself] to comment on the production where [he] cannot restrain [himself] from giving praise" rather than straying and taking swipes at a faith he does not understand. If Mr. Hogg, or anyone else for that matter, would like to learn more about our faith, we would be glad to meet with you sometime.

Yours Sincerely,
Francis Chong
Daniel Sandoval
and 27 other signatures
(on file in the *Tech* office)
for the Newman Center

L.A. by Bus

To the editors,

From the moment we first come here as undergraduates, we're told

in many different ways that life at Tech without a car is the life of a chained-up dog. We're told that if we are not fortunate enough to own our own cars, we live as close to L.A. as to Miami. True, having a car makes things easier. But there are other ways to avoid becoming trapped here, to get out and do what we want!

To avoid constantly bumming rides off your friends, try traveling *independently* with the L.A. bus system. By catching a bus from the corner of Del Mar and Hill (a block north of San Pasqual) you can get to: Plaza Pasadena, Old Town Pasadena, the AMC & UA movie theaters, the Glendale Galleria, and just about anything you want to see in Pasadena. Walk to Colorado, and you can get the 401 bus downtown and make one connection to go see the Arsenio Hall show on Melrose, make a day trip to Huntington Beach, etc. All on your own, for about a buck per ride (two for long rides).

The system works! I've used it to go shopping in Hollywood, have lunch in Rosemead, and see a movie in Old Town. Getting off campus feels good. Your R.A. has a bunch of schedules and will help you figure out how to get where you want to go. So ask about them, and try spending a Saturday exploring this huge city. You might see something you've never seen before.

Mike Clemens

The War in
El Salvador

To the editors,

While I was pleased to see recent events in El Salvador in the World News section of the November 6th issue of the *Tech*, and while I appreciate the difficulty of saying anything meaningful in one short paragraph, I must take issue with the tone of the reporting. This is an excellent example of how so-called "objective journalism" can lead to misleading if not inaccurate reporting.

The short article states that "The leftist (FMLN) guerillas and the government of El Salvador have failed to comply with their deadline....Both sides have blamed each other for acting slow on the agreement." This report implies a moral equivalence between the two sides, and is typical of "even-handed" reporting on El Salvador in the last decade. One usually hears it from reporters (or members of Congress, or whoever) in the following form: "Well, there are abuses on the left, and there are abuses on the right, and most people are caught in the middle." Nonsense. Ask America's Watch or Amnesty International about the tens of thou-

sands of civilian deaths and cases of torture in the last ten years in El Salvador—you will find that well above 50% are definitely attributed to the armed forces and their allied death squads (the right), that well below 5% are attributed to the FMLN (the left), and that among the uncertain cases a similar pattern of likely perpetrators emerges. There are confirmed massacres of thousands of civilians by uniformed government troops, whole villages destroyed. I could list more than you would want to read. The FMLN is certainly not perfect, but they compare well to other armies during wartime, and there can be no doubt that they are the good guys as far as human rights are concerned. (As a footnote to show what I mean about the "objective" press, the FMLN shot down a US helicopter over controlled territory and an FMLN guerilla shot and killed one of the crew members on the ground. The FMLN said it would, as it does in such cases, try the offender. The New York Times snidely reported, "The FMLN's criminal justice system has been criticized by Amnesty International for its use of the death penalty." That was the worst thing they could say, and the irony of the statement apparently escaped the editors.)

To return to the issue of the peace accords, I would like to make three factual additions. The first is that the initial violation of the timetable was made by the government last March when they did not dismantle, but rather renamed, the three most oppressive police forces (the Secretary General of the UN will back me up on that). The second is that while "both sides have blamed each other for acting slow on the agreement", there is a significant and powerful

faction within the government side, army officers who stand to lose by the agreement, who have accused their own side, the government, of moving too fast on the agreement. The third is that the FMLN agreed unconditionally to the last UN-brokered agreement while President Cristiani said he would not abide by it. Those who seek here for moral equivalence will do so in vain.

The shame for the US in all this, of course, is the US government's role in financing and training the Salvadoran military, to the tune of a million dollars a day for much of the eighties, to prop up a regime that none of us would call representative, democratic, or even respectful of the most basic human rights of its own citizens. The shame for the press is that it promoted a belief in a moral equivalence between the two sides in the conflict, all in the name of "objectivity". Citizens in a free society need to take sides on some issues to keep their moral integrity. The press fools itself if it thinks it is not taking sides by reporting both sides as equally bad.

Sincerely,
Michael Scott

The Pumkin
Drop

To the editors,

Last week's *Tech* featured an article written by a certain Chris Echols about the Halloween pumpkin drop—an article which I find fault with and am personally affronted by. Certainly, Mr. Echols did not intentionally cause me any pains, but his poor journalistic style and his obvious lack of concern and insight grate upon my "mental ears,"

so to speak.

First and foremost, Echols left out important details of the actual pumpkin drop. His article focused more on the pre-pumpkin drop preparations than on the exciting and climatic gathering before and above the front of Millikan Library.

For example, he made no mention of the "Flash Pumpkin" with its brilliant flashbulb. Nor did he mention the candied apple that also took the plunge. What's more, he completely forgot to mention the watermelon-head effigy called "Rich." I must admit that he did remember to mention the LN₂ that was dumped after most of the audience had left, but he failed to even count the number of pumpkins that were dropped.

Second, Echols speaks too much with the zeal of carnival barker. It is as if he is trying to sell his cause, however empty and uninformative it may be, to anyone present and reading.

Sincerely,
Dennis Chang

AIDS Walk

To the Caltech Community:

Thank you for supporting me in the 1992 AIDS Walk - L.A. Your donations, large or small, are really appreciated.

Thank you, again.

Sincerely,
Paula C. Samazan

THE CALIFORNIA TECH

Volume XCIV • Number 8
November 13, 1992

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Published weekly except during examination and vacation periods by Associated Students of the California Institute of Technology, Inc. The opinions expressed herein are strictly those of the authors. Letters and announcements are welcome. All contributions should include the author's name and phone number and the intended date of publication. The editors reserve the right to abridge and edit all submissions for literacy, expediency, or anything else.

Turn in copy (preferably on Macintosh 3.5 inch disk) to the *Tech* mailbox outside SAC room 40. E-Mail may be sent to editors@tech.caltech.edu. The deadline for copy is Wednesday at noon; for announcements, Tuesday at 5PM.

The *California Tech* is distributed free. Issues will be mailed off-campus upon receipt of \$10 per year to cover third-class postage and preparation costs.

Printed by News-Type Service, Glendale.
ISSN 0008-1582

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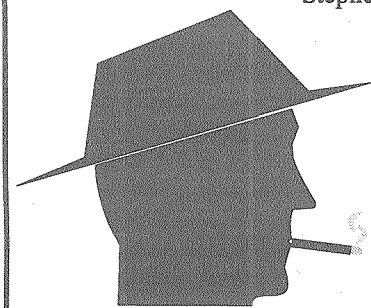
BASIC INSTINCT

Baxter Lecture Hall
7:30 and 10:00
\$1.50 A.S.C.I.T. and
\$2.00 non-A.S.C.I.T.

Next Week:
Wayne's World

Crime & Incident Beat

Stephen Heise



crime tip: This is a small campus, get to know everyone. When you see someone you don't know, ask them for their name. Typical responses are along the lines of, "Leave me alone, can't you see I have a deadline?" or "What, you mean you don't know ME?" Wrong answers are, "Oh, I was just borrowing it for my aunt's

operation!" or "Uh, um, I don't remember, oh yeah, I gotta go!"

10-29 to 11-5 A Ceiss Microscope with attached 35mm camera was stolen from a lab on the first floor of Braun. (\$20K)

Note: Braun Labs, with its open interior design, is a common target for theft. Once a criminal gains access to Gates, Crellin, Kirckhoff, Alles, Church, Braun, or the steam tunnels, he/she has free run of the whole place. Just ask any Frosh.

11-7 The car of some guests to the Medieval Renaissance festivities on the Court of Mann was broken into. Stolen were \$80 cash, a gold & diamond ring, and a diamond wedding band. The car was parked at the Chester lot. (\$2580)

11-9 In last week's CIB, two similar incidents were reported involving stealing cars at gunpoint. It has now been verified that the two people in custody are indeed the same ones that struck here on campus November 2nd.

11-11 A 16 year old male Hispanic, 5'5", 150 pounds, was observed leaving the Lura lot carrying a car stereo. The suspect was heading for a car containing three other boys the same age. When the suspect was stopped by Security, the waiting car drove off. At first the suspect stated that the radio belonged to his aunt and that he was just carrying it. A check of the vehicles in the area revealed that one of the cars was missing its stereo. When the owner of the vehicle was called to the scene and the radio identified as stolen, the suspect confessed stealing the radio and admitted that the car which drove off contained his friends who were waiting for him. Pasadena Police were called in and the suspect arrested. The \$200 stereo was kept as evidence by the police.

This Week Total: \$22,580

DILBERT® by Scott Adams

Panel 1: DILBERT: THERE... I THINK I'VE INVENTED A WAY TO SEND VAST AMOUNTS OF DATA WITHOUT FIBER OPTIC CABLES.

Panel 2: IT'S A SIMPLE APPLICATION OF J.S. BELL'S THEOREM. HE SHOWED THAT IF YOU BREAK UP A MOLECULE AND CHANGE THE SPIN OF ONE ELECTRON, THE SPIN OF THE OTHER ELECTRONS ORIGINALLY JOINED WILL IMMEDIATELY CHANGE TOO. NO MATTER WHERE THEY ARE.

Panel 3: WHAT DO YOU THINK THE FIBER OPTIC INDUSTRY WILL GIVE ME FOR THIS? A HORSE'S HEAD IN YOUR BED.

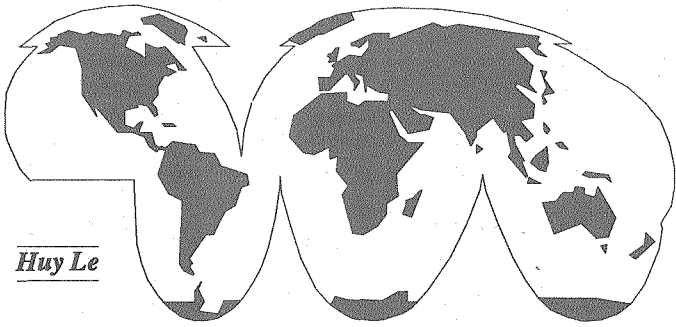
Panel 4: FROM THE LOOKS OF YOUR GARBAGE, YOU'VE INVENTED SOME SORT OF MOLECULE DIFFUSION COMMUNICATOR.

Panel 5: SPECIFICALLY, YOU'VE ADDED THIS CALCULATION ERROR HERE.

Panel 6: AH, YES, EINSTEIN THOUGHT THIS TYPE OF THING MIGHT WORK. PHYSICIST JOHN STUART BELL KIND OF FLESHED IT OUT IN 1964. BUT YOU'VE REALLY ADDED SOMETHING...

Panel 7: HIS NAME IS DILBERT. HE INVENTED SOMETHING THAT WOULD MAKE OUR ENTIRE PRODUCT LINE OBSOLETE.

World News



Huy Le

International Trade

The Bush administration announced high punitive tariffs on white wines imported from Europe, hence risking a trade war. The action was caused by the European Community's subsidies of its growers of certain plants, which the U.S. claims is disadvantaging American exporters. The EC rebuffed but did not rule out a French request for retaliation, which would erect a series of trade barriers. Such a trade war could complicate the completion of an international trade agreement, and would give president-elect Bill Clinton his first foreign policy crisis. The General Agreement on Tariffs and Trade is currently holding emergency meetings. At this point it has blamed both sides for the controversy.

Germany

Hundred of leftist youths, among a crowd of 300,000, pelted officials with eggs, fruit, and rocks to protest the recent increase of attacks against foreigners and the inability of the government to control the violence that plagues Germany and the political extremism that causes it.

Bosnia

Rival military leaders in Bosnia-Herzegovina announced another cease-fire, which the international community hopes might be more effective than previous ones, since it was imposed by the field commanders and the coming winter could threaten the survival

of the city if relief supplies are hindered by further fighting..

Colombia

A state of emergency was declared by President Cesar Gaviria as a result of bloody bombings across the nation. Since the last round of peace negotiations broke up with the government, leftist guerrillas of the Revolutionary Armed Forces of Colombia and of the National Liberation Army stepped up attacks on police and army troops. In their latest siege, 300 rebels shot to death 26 policemen guarding an oil field. Gaviria condemned the estimated 8,000 rebels as mere criminals dealing in the drug trade.

Ireland

Irish Prime Minister Albert Reynolds called a general election in response to a no-confidence vote by the lower house of the Parliament. Reynold's conservative Fianna Fail party government fell after a dispute with the Progressive Democrats, its junior partners in the ruling coalition.

Middle East Talks

Before Bill Clinton takes over, the Bush Administration is planning to increase pressure on Israel and its Arab adversaries in the peace negotiations begun a year ago.

Israel & Lebanon

Israel threatened to retaliate if the Beirut government does not restrain Shiite militias from firing rockets at northern Israel. The ultimatum came as Israel resumed peace talks with each of its Arab neighbors.

Lebanon's chief delegate blamed Israel for starting the exchange of bombings.

Russia

Russian President Boris Yeltsin said that he is prepared to use his emergency powers to prevent any right-wing coup by forces, who might be currently plotting.

Yeltsin congratulated U.S. president-elect Bill Clinton on his victory and proposed a summit immediately after his inauguration to build strong relations that would turn the two countries into complete allies. Until then Yeltsin suggested they exchange envoys to share information about their plans.

The first serious ethnic violence in Russia since the collapse of the Soviet Union has prompted Russian troops to be called into the North Ossetia region. They were instructed to confiscate weapons from illegally armed Ossetian and Ingush militiamen and force them to stop the fighting.

On the 75th anniversary of the Bolshevik Revolution, twenty thousand Muscovites protested outside the Kremlin, demanding the resignation of Yeltsin.

Sri Lanka

A recent massacre of 163 Muslim civilians, soldiers, and police by Tamil guerrillas, marking the worst day of slaughter in the country's nine-year civil war, has brought charges of ethnic cleansing and doubts about the possibility of an independent Tamil homeland.

Cambodia

As a result of the breakdown of international peace talks in Cambodia, Khieu Samphan, a leader of the radical Khmer Rouge, predicted that fighting will resume between his guerrilla forces and the army of the Phnom Penh government. Samphan sought to place all blame of renewed fighting on the Phnom Penh side.

THEATRE ARTS AT THE CALIFORNIA INSTITUTE OF TECHNOLOGY PRESENTS

A Man for All Seasons

By ROBERT BOLT

By special arrangement from Samuel French, Inc.

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ENTERTAINMENT

Judy Fiskin at MOCA: A Thought-Provoking Show

David W. Hogg

Currently there are three exhibits at the Los Angeles Museum of Contemporary Art (MOCA). "Yves Klein: The Fire Paintings" and "Judy Fiskin: Some Photographs 1973-1992" are part of the MOCA Focus Series on influential contemporary artists, and "The European Presence in the Permanent Collection" shows off some of the MOCA's property. Yves Klein made his fire paintings by burning treated paper with flame throwers; the pieces from the permanent collection span a broad range of media and subject matter; both shows are worth seeing. (In the latter, we members of the Caltech community should be amused by Mario Merz's "Alligator Ensemble" in which the Fibonacci sequence up to 987 appears in neon lights.) However, I went specifically to see the Fiskin show.

What I had heard about the Fiskin show suggested that her photographs would constitute an attempt to document some of the aesthetic influences on her Southern-California childhood. Indeed, this theory is backed up by the first few photographs I saw at the show (the earliest work in the exhibit): a triptych depicting three small, typical Southern California stucco buildings; views of the desert around San Bernadino; several views of corny 1950's "dingbat" apartment buildings. I am sure that every photo would bring back memories to anyone who grew up in this part of the country. All the photographs in the show are very tiny; this forces the audience to move in close. Each picture must be inspected independently of the others, and each viewer must be alone in looking at each

picture. These characteristics seem to make the show a very personal document, like a photographic diary.

On the other hand, Fiskin herself compares the small sizes of her images to those of illustrations in art history texts. [source: Goldstein, A. "Judy Fiskin," in *The MOCA Contemporary*, vol. 1, no. 7, October 1992.] This seems to suggest that the show is more like a photographic textbook on art or aesthetics than a photographic diary. We get a better sense of this in looking at her later pieces. These include

pictures of very ornate pieces of furniture, photos of tacky wall ornaments, and tiny details of paintings and engravings. As the blurb on the gallery wall explains, her photos "examine the aesthetic decisions behind vernacular architecture, popular culture, and art." These later photos are like illustrations in a book discussing the very fine points of design.

The early photographs, which seem more concerned with childhood influences, are very accessible to laity like myself, but as the later

photographs become more deeply involved in analyzing art, they become less accessible. Perhaps the show attempts to find connections between the fine discriminations of art theory and the gross influences of popular culture, or perhaps the evolution of the photographs is merely evidence of an evolution in Fiskin's artistic interests. Whatever the case, the Fiskin show, especially combined with the other two exhibits, is worth a trip to the MOCA.

"Judy Fiskin: Some Photographs 1973-1992," through 6 December 1992 at

The Museum of Contemporary Art, 250 South Grand Ave., Downtown Los Angeles. Hours: Tuesday through Sunday: 11-5, Thursday: 11-8.

Admission: \$4, \$2 for students. RTD instructions: take the 401 or 402 from (e.g. Colorado and Lake in) Pasadena or the 485 from (e.g. California and Lake in) Pasadena to First and Grand in L.A. The MOCA is right there.

Bridge Without Sam

Jeff Goldsmith

Dilemma

Playing in the first round of the national Grand National Teams, vulnerable, I pick up

♠Q63 ♥Q964 ♦AK7 ♣KQ3

RHO deals and opens 1♣, which I overcall with 1NT, showing a good 15 to a bad 19 points. The opponents are silent thereafter, but partner is not. He transfers to hearts and rebids 2NT, which invites me to choose between 2NT, 3NT, 3♥, and 4♥. The normal bid is 3♥; I have a minimum. I like the fit so much, though, that I go for the game. My honors rate to be placed well, and a nine-card fit tends to supply game with less than normal high-card values. Add in that we are vulnerable, so I get pretty good odds in my favor, and I am going for it. I buy the following dummy, which fits surprisingly poorly:

♠ K4
♥ A8752
♦ J942
♣ 98

N
W E
S

♠ Q63
♥ Q964
♦ AK7
♣ KQ3

West	North	East	South
1♣	1NT	Pass	2♦
Pass	2♥	Pass	2NT
Pass	4♥	(All Pass)	

1NT = 15+ -19
2♦ = transfer to ♥

I get the lead of a small club and my prospects do not look good. I have two Aces to lose, a sure trump loser, and possible further losers in diamonds and trumps. This will need some luck, I think. I play low from dummy to the first trick and RHO plays his Ace. He continues with a second club, which I win with the King.

It seems as if the first problem must be to take care of trumps. I lead a small trump to the Ace and a small one back, RHO showing up with KJ alone. I may need a fast entry to dummy, so I unblock the ♥9 under the King. RHO returns a diamond and I win the Ace and take stock.

I need two discards for the diamonds in dummy, or the Queen coming down doubleton. Is there a way to get two discards? The club King will supply one and if RHO takes his spade Ace on the first round, spades will provide another. I see the way now. I cross to dummy with a trump to the Eight and lead a small spade from dummy. East is pickled on the horns of a dilemma, to mix metaphors. If he rises with the Ace, I have two diamond discards, but if he ducks his Ace, I can pitch the ♠K on the ♣Q and have no spade loser. As seems likely, if the ♦Q is onside, I would then only lose one diamond, one club, and one heart. East chooses to rise Ace and continue spades; I win and return to hand by leading the ♥5 to the 6 (I could have used the ♦K, but this is prettier) and pitch both losing diamonds on black Queens. Making four for a 12 IMP gain.

This dilemma is commonly known in the bridge world as a "Morton's Fork Coup," after the famous tax collector who said, "if you live well, you must have money to spend, so you can pay your taxes; if you live cheaply, you must be saving your money, so you can pay your taxes." Here East was caught between paying his taxes by losing the spade Ace or the diamond Queen.

I noted in the narrative that it "seemed" as if the first problem were trumps, but that was short-sighted. If East had continued clubs after winning the first trump, he could have put me on the dilemma first. I would have to discard on the club before leading the small spade from dummy. Better would have been to cross to the heart Ace immediately and then play the small spade, ensuring the contract when it could be made. Fortunately, RHO did not see the Coup coming and I got my story.

The Caltech Bridge Club meets every Monday night at 7:15 in Winnett Lounge. Everybody is welcome; call Jeff Goldsmith at x2818 for details.



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The IHC Minutes:

Karen Ross

October 26

Present: Rob Whiteley, Cathy Hafer, Mike Nassir, Eric Loftsgaarden, John White, Michelin Aldridge, Heath Hunnicutt, Paquito (Pa), Katy (Bl), Ed (who has a headache), Joanna (Ri), Rob (Li), Rich (Fl), Alf (Da), Ben, and me.

The meeting of Monday, October 26, 1992 began at 10:35 PM.

Cathy Hafer talked about the dinner for student leaders at President Everhart's house scheduled for Tuesday, October 27. She urged the IHC to plan ahead of time what issues to bring up at the dinner because this was the students' one opportunity to speak directly to President Everhart. Last year some topics that were discussed were student/administration relations, the sexual harassment policy, the North House renovations, and C-House. Possibilities that were suggested for this year's discussion were the multi-house parties, Rob Cobb's role, and relations with the DRL's office.

Fleming's ath team complained that Lloyd did not note the time when they submitted their Disco challenge. According to the Little t, the time is supposed to be written on the challenge. It was delivered to the ath man's room, and he received it on time. The IHC decided that the only purpose of noting the time was to uphold a House's challenge if it is not received in time. The challenge was not disqualified.

Eric and John left at 10:55 PM.

As required by law, Barbara Green will be reviewing DAPAC this year. Mike Nassir took down the names of students who are interested in participating in the review.

The multi-house party proposal

was finalized and photocopied so that it could be presented to Gary Lorden, Rod Kiewiet, Barbara Green, and President Everhart on Tuesday.

The meeting ended at 11:25 PM.

October 29

Present: Paquito (Pa), Rich (Fl), Jo-Anna! (Ri), Katy (Bl), Alf (Da), Rob (Li), Ed (Ru), Kim West, Karen Bruner, Bo Adler, Ben, and me.

The meeting of Thursday, October 29, 1992 began at 10:00 PM.

That status of the multi-house party: Rod Kiewiet thought it was good idea as long as safety concerns could be adequately addressed. Ed and Ben talked to Gary Lorden, but did not give a final yes or no. He pointed out that a lot of money was spent on the last Interhouse, but that safety, not money was the primary issue. He foresaw two possible outcomes. Either Kim, the Deans, and the IHC come to an agreement and Gary Lorden's role is to say yes or no to it, or the administration and the students cannot agree and Gary Lorden's role is to arbitrate. The second path should be avoided. He also noted that people higher up in the administration than he is might need to approve the proposal.

Kim's concerns about the multi-house party were mainly crowd control, alcohol, and the safety of construction projects. On the subject of crowd control, the IHC pointed out that the proposal calls for as many security guards as were hired for the last Interhouse. In addition, this year students would be posted with the security guards to help them. Ricketts plans to give student security guards yellow bandannas so that the regular security can easily identify them. Also, since the advertising is being controlled

so that no outsiders who are not specifically invited will hear about the party.

Kim thought that the alcohol concern could be answered by following the DAPAC guidelines. Several Houses said that their RA's would be involved in running the bar during the party. Also, the Houses plan to agree on one hand stamp for alcohol so that people stamped in one House can be served in another House without any problems.

Construction shouldn't be much of a problem since it is all decorative. No one (fortunately) is planning to have a ride this year.

Blacker is having a Halloween party on Saturday night beginning at 9 PM with a break at midnight to watch the pumpkins fall.

Any presidents who want a copy of the hazing packet should get one from Kim.

The ban on fires is still in effect.

This week Kim and Kevin Austin will be having a meeting with the campus security officers. Suggestions for discussion topics were security's familiarity with the campus and with the keys to campus buildings. Joanna brought up the idea of having students work for security as escorts.

Finally, Kim is planning several dinners with the directors of various student affairs departments. Five or six students will be invited to each of these dinners.

The meeting ended at 11:30 PM.

November 4

Present: The presidents (Katy, Alf, Rich Baltzeran, Rob R., Paquito, Joanna, Ed), Ben, Mark Montague, Beau Adler, Rob Ellis, and Rich Benzinger (taking minutes).

The meeting started at 10:47.

Ben recouped the state of the

multi-house parties:

Ben and Mark talked with Hal Ginder about security concerns. Ginder seemed concerned with recurring swarms of people, remembering the violence in 1989. Some sort of compromise might have been feasible.

Ben then talked to Kim West, who indicated that debate over these parties had caused a stir in the student affairs end of the administration. She suggested that, had we just submitted the party forms with less rigor, she might have been able to approve them unilaterally.

Ben attempted to speak to Gary Lorden, but was seemingly given the cold shoulder. In trying to contact Lorden, Ben was told by his secretary "He's unwilling to meet with you because he has not yet formed an opinion."

Later, Rod Kiewiet met with Ben. Kiewiet said, with obvious regret, that the deans, MOSH, DRL, and Lorden had met, and that Lorden had vetoed the parties over the protestations of Kiewiet and West. Further, Lorden stated a new policy, that no more than two courtyards may have active parties at any one time, although multihouse parties in single courtyards remained permissible. Generously, Lorden pointed out that houses were now permitted to construct party stuff in their courtyards, within the above constraints.

Ben calls West. She reports that she's been playing telephone tag with Lorden herself. Further, she thinks that if we ask for a two-

courtyard party right now, Lorden will nix it.

Possible courses of action are discussed. Primarily, there's a general agreement to write a letter to the *Tech* outlining the IHC's grievances. Specifically, the letter should focus on Lorden's handling of the issue, most particularly his unwillingness to undergo any discourse with the students.

Additionally, the letter might contain Mark's observation that a climate of respect will tend to produce good scientists, while a climate of regulation and distrust is more appropriate to producing good lab technicians. It might also point out the Many Ways that Students Help the Administrators (prefrosh weekend panel, frosh camp UCC's...).

Discussion ensues about who should receive the letter. Certainly Lorden, West, Kiewiet, and probably Jack Richards (pres. of faculty senate) should get copies.

More practically, Page and Blacker want to hold parties on the 21st. Dabney may hold a party on the 21st. Ricketts, Ruddock, and Lloyd don't think construction parties will occur during first term.

Other issues, like the Housing Office's popular new \$25 policy and the proliferation of the neon green fire-hazard move-your-stuff-in-24-hours-or-we'll-shoot signs, are deferred to a future meeting.

The next meeting is set for the following Wednesday at 10:30.

The meeting adjourns at 11:45ish.

ASCIT Minutes: Nov. 10

Korhan Gürkan

Present are the BOD, John White, Gavin Claypool, Fru & Mike Crowder.

ASCIT Movies: Yes, they're here, but they do not have the mid-term report. Fru thinks that the ASCIT Activities Chairman should be changed into an appointed office rather than an elected one since the responsibilities of the position greatly increased with the purchase of all the new equipment. According to Fru, after the appointment, the chairman will be responsible of choosing an activities team. I think it kinda makes sense, but we might need a bylaw change for this so, we'll see what'll happen. By the way, according to Fru, the sound quality is getting better every week

since they are beginning to understand how the equipment works.

Committees:

Athletics: Albert Lee, Todd Mc Laughlin (alt.)

Grievance: Nathan Frei (alt.)

Academic Policies: Nathan Frei (alt.), Heath Hunnicutt (alt.)

By the way, signups for the Women's Center positions are STILL open since no one has signed up. We need one undergrad on the Advisory Board and one on the Director Search Committee.

UROH: June got started on UROH (Undergraduate Research Opportunities Handbook)

German Club: A group of people have started a club to introduce the cultures of the German-speaking countries to students. They are planning to have some gatherings in which conversing in German will be greatly encouraged. And well, they need money. The BOD decides to recognize this club mainly because I am a member (7-0-1). Then, we have the most heated discussions of the night and finally, we decide to give the German Club \$50/term (6-2-0). (Ooops, sorry the count was (4-4-0), but Amit showed his leadership qualities and broke the tie by approving the motion in a convincing fashion.) So, come and talk to me in German next Thursday from 8-10 p.m.

Big T: John White, one of the Big T editors, showed up to the meeting because he thought we wanted to see him. Are you crazy? Actually, they are doing a pretty good job so far. According to John, they have already got started on making a budget, etc. John leaves the BOD pondering "Wow, there are responsible people in this campus!". Keep it up, Big T!

And that's it for this week. Feel free to come to the SCIA Water Polo Championships at Whittier this weekend.

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Haslop/Sanders Duo to Perform in Dabney


Cara Stemen

The Haslop/Sanders Duo, featuring violinist Clayton Haslop and Guitarist Jack Sanders, will perform on Sunday, Nov. 15 at 3:30 pm in Dabney Lounge. One of the highlights of their program will be a fantasy from Bizet's "Carmen." This duo has performed at New York's Merlin Hall, the 1985 and 1988 Guitar Foundation of America Festivals, the Fairbank's Summer Arts Festival, the


Redlands Bowl and on the Chamber Music in Historic Sites series. The Duo has also toured Hawaii and the Peoples Republic of China, and is featured on a critically acclaimed compact disc from Centaur Records, distributed by Harmonia Mundi. The concert is open to the public and free of charge. For information call x4652.

Jim's Journal


Today Steve, Dan and I filled out the marketing survey Steve got in the mail.




Under race and religion and political opinion, Steve wanted to say he was an anarchist Catholic Eskimo.



Dan thought he should be a New Age Republican from Iraq.



He and Dan laughed and laughed, and couldn't decide which combination would be more fun.



by Jim

Jim's Journal by Jim

Steve, Dan and I wrote more silly answers on Steve's marketing survey today.



Dan kept saying, "Tell him you make \$5 a year—tell him \$5 a year."



Steve didn't want to, but Dan kept insisting on it, so Steve finally wrote it down.




He also wrote that he has purchased 95 teasers in the last three months.




Jim's Journal

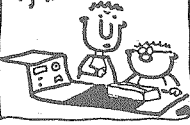
Today at the copy store, Joel was showing Dan how to fill the copier with toner.




He explained it kind of quickly and then told Dan to try it.



Dan didn't do it right and Joel said, "C'mon, it's simple," and explained it again.



"I can't teach this guy anything," he said.



by Jim

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(continued from last year)

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continued from page 1

Kirschvink

off into the sea. There was a big mystery at the time, nobody knew where all the magnetite was coming from. magnetic bacteria were discovered. Biological magnetite really filled the gap to where all the magnetite was coming from. So that's how I got into biomagnetism. The moral of the story is: if you find something that's weird and interesting, go for it. Don't worry about what everyone else is saying. So I went to Princeton as a graduate student and as soon as I got there I started hearing rumors about honey bees that dance to electromagnetic fields.

E: *That's bizarre.*

K: It's really bizarre. I said "wait a minute. We know about the magnetic bacteria, we know about the chitin, we know that animals make magnetite. We don't know how many animals make it but damn it if a honey bee is responding to an electromagnetic field, the obvious way they could do that is with little magnets. I know how to look for that!" It took me a month to convince the biology professor there that this was not a nutty idea and that he should really give me some of his honey bees. As soon as he gave me the honey bees I flew out to Arizona and measured the magnetism and bango! It was there. I localized it and came back and he was stunned. Of course, when you solve the problem for one animal, it's trivial to do it for the next. It turns out, when we started looking at birds, the first thing we discovered is that the magnetic material is in the front toward the nasal passages. We switched from the birds to the fish because they were larger and cleaner animals to work with. It turns out, in the fish and the birds, a branch of the thalamic nerve runs in and puts connection in. And people have done single cell recordings from the

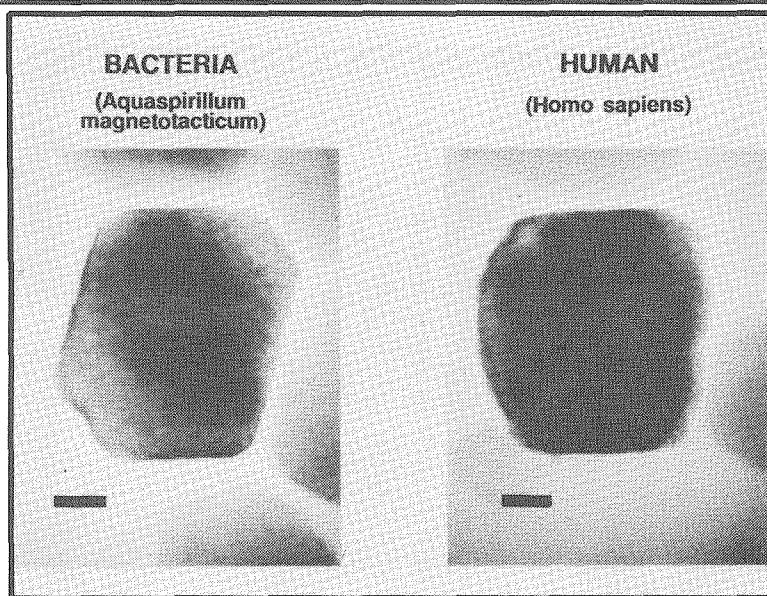


photo by Atsuko Kobayashi-Kirschvink

A comparison of Magnetite Crystals isolated from a bacterium and a Human brain. The fine grid-work of lines within the crystals represents the electron shadows of the atomic lattice planes. The scale bars on both figures are 10nm in length.

nerve fibers running back, and it turns out that about 10 to 15 percent of the nerve fibers convey magnetic information....And it's only that branch of the thalamic nerve....And now, bang!

E: *Humans.*K: *Humans.*E: *So what is magnetite used for?*

K: That was the subject of my Watson lecture. One is clearly a possibility of reception—magnetoreception. If birds do it, amphibians do it, rodents do it, whales do it, fish do it, and if it's in a branch of the thalamic nerve, which we have, then we really have to seriously entertain the possibility that there might be a subconscious sensitivity in humans.

E: *Could this "magnetic sense" simply be a remnant from our evolutionary past?*

K: Sure. It's quite possible. We don't use it. Every migratory animal that has been studied has shown some evidence for a magnetic sense. It's much easier to say "everything probably had it, maybe a few organisms have lost it." Perhaps hu-

mans have lost it, perhaps we have not. The evidence for humans is equivocal. Reproducibility is the acid test of science. And the problem is, none of the human magnetic affects that I know of have been replicated.

E: *How can you test for this?*

K: You can test for perception. You don't have to be aware of a stimulus to perceive it. There's some very good examples of that. The case where someone had a broken spinal cord—and couldn't perceive anything down. But they could still demonstrate sensitivity. There's the thing called the Galvanic skin response, where you measure the resistance across the palms. Skin resistance is a good measure of reaction. Say you measure the resistance in one hand and give a mild shock in the other. You flash a light on, and a few seconds later you shock them. The shock causes a drop in skin resistance. You do this two or three times, and eventually they learn that the light means they're going to be shocked. That means you associate the light with

the coming shock. It turns out you don't even have to be aware of that. It's not your conscious mind that does that. This case with the man with the severed spinal cord—that works on him. He had no perception down, he couldn't feel himself being shocked. And yet, as soon as the stimulus came on, his skin resistance dropped before the shock. A classic conditioning experiment. So we want to try something like this with magnetic fields. So, send your check to the Caltech Department of Geology, care of Professor Kirschvink, Human Magnetoreception Program.

E: *Human Magnetoreception Program. Is that what you're going to call it?*K: *Why not?*E: *This sounds like a combination of biology, geology, and psychology.*

K: Sure. If you can demonstrate a sensitivity to the magnetic field there are other possibilities which are kind of intriguing. Like being able to train it into awareness. If it's there subconsciously and you can detect it, there are other techniques psychologists have developed—for example, a wine connoisseur trains himself to develop the taste sense. There is no reason why, if there is a magnetic sense, you can't bring it into awareness. It sounds like the extra sensory perception, but it's not.

E: *It would just be an additional sense?*

K: An additional sense—with proper receptors—the whole works may be there, but simply we're not currently programmed to be aware of it.

E: *Was this the main topic of your Watson lecture?*

K: I'm giving another lecture for the associates with the provocative title "Could Humans Have a Sixth Sense." So at the Watson lecture I did not want to emphasize the magnetoreception aspect. There are

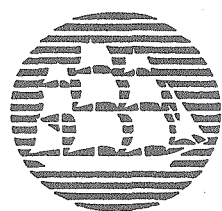
easily implications ranging from could magnetic resonance imaging hurt you. For example, the whole literature on MRI ignores magnetism. It assumes there is nothing ferromagnetic in human tissue.

E: *What else did you discuss at your lecture?*

K: I mentioned a little bit about the controversy over electromagnetic fields and cancer. We now know that various types of tumors also produce magnetite....The moral of the story is: find something that interest you. I played with magnets when I was a kid. I loved magnets. It's fun that I can actually use magnetic techniques in geological studies and biological studies. And I'm happy doing that. It's fun. We're learning things. And as an undergraduate at Caltech—firstly, you shouldn't be here if you don't want to do research, and the only way to learn research is to start working with people who are doing it. You learn it osmotically. You can't teach that in a classroom. A common complaint that other institutions had about Caltech undergraduates, prior to the SURF program, was that they were not very good at recognizing a good problem and running with it. I have seen changes in the undergraduates since the SURF program was put in. You start training the students—getting them involved in a real problem, not just cleaning the desk in some physics computer room. And there is no field of study that a Caltech undergraduate cannot reach the leading edge of in about two years.

E: *So is undergraduate education better these days?*

K: Perhaps. The SURF program should be institutionalized. It should be funded and be a requirement coupled with the senior thesis. If you're going to graduate with a bachelor's from Caltech, you ought to be able to do research. And that's what a Caltech B.S. should mean.



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YNEWSYNEWSYNEWS

Katy Quinn

It's Friday the 13th, everybody should be extra careful. Don't even look cross-eyed at a black cat. If you're worried about bad luck, you can increase your karmic potential by signing on to one (or more!) of the Y's many volunteer programs. Next week there will be trips to Union Station to help the homeless; one Monday 8:30 am to 11:30 am and another Friday 11 pm to 2 pm. The tutoring program for the Pasadena School District is up and running and we will be going to help out at the Arroyo Seco Ranger District soon, come up and sign up!

Calling all Y Hikers! It's time for the Y hike reunion, Thursday at 5pm in the Y lounge (that place where you slept the night before the hike). If you bring the photos and the stories, we'll bring the pizza and the soda. I'm afraid my stories aren't so life-and-death this year; you can live for three whole days without water, and 10 hours straight playing cards isn't exactly a thrill a minute. You know, when I was a frosh the Y hike was tough...

Other events next week; there will be a United Way fair in the Winnett Lounge, Tuesday 11:30 am to 1:30 pm. Friday there will be a Graduate student mixer in Catalina Rec. room 2, time to be announced. Look out for this one grad students, this will be a great opportunity to find out about the Caltech Y and get some free food! Maybe you'll like us so much, you might want to join the student excomm (hint, hint).



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The Practical Bohemian

Chris Echols

After a deluge of advertising, Ed Metzger finally hit the stage Saturday night as *Albert Einstein: the Practical Bohemian*. His two act solo, co-written by Metzger and his wife Laya Gelff, who also directs the production, filled most of Beckman Auditorium.

Metzger's previous credits include several Broadway appearances and television appearances in *St. Elsewhere*, *Hill Street Blues*, and *Cagney and Lacey*. His one man show on Einstein debuted at the Matrix Theater in LA, and from there went to Off Broadway in New York. He has also developed a second show called *Hemingway: On the Edge*.

The first act of *The Practical Bohemian* began with music by Peter Ogilvie: *In Outer Space*. Then Metzger, donned in his Einstein garb, gave his first melodramatic solo speech on the mysteries of the universe. Then the audience found itself being spoken to by the Great Einstein. The resemblance is striking. Metzger's outfit, speech, and mannerisms have been carefully refined. When Metzger is on stage, he is Einstein.

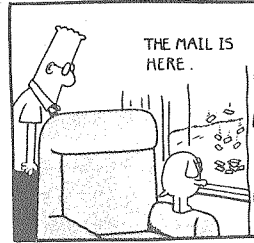
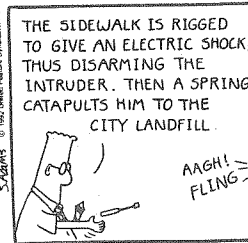
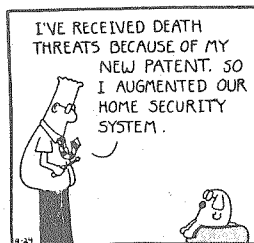
Well, almost. When Metzger is on stage, he is the "absent minded professor." His performance made sure to cover all the various absent minded professor stories. The audience was entertained by these stories, but they did little to show the character of the man. Metzger did more to perpetuate the absent minded professor archetype than reveal the subtleties of Albert Einstein.

There were moments in his performance, however, when Metzger did portray Einstein as a man and not as a caricature. He did touch on important parts of the man's life, including his two marriages and his relationships with his sons. He presented Einstein's struggle with his pacifism and his hatred of Nazi Germany. One scene has Einstein

making a movie for the U.S. Army, explaining why stopping Hitler should be important to Americans. The closing scene is especially well done, with Einstein sitting silently in his chair listening to the radio announcer describe the first atomic bomb—dropped on Japan—not

Hitler's Germany.

But tragedy was not a large part of this show—it was, for the most part, a light-hearted portrayal of Einstein. It was entertaining but not tremendously uplifting. However, it was certainly a bargain at only \$7.50 for orchestra pit seats.



A ten year old attends Caltech



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continued from page 1

Interhouse

between Ruddock and Ricketts, security was beefed up, and the one gate in the fence was staffed all night with people checking ID's to make sure only Caltech community members and other college students got in. However, the difficulty of getting in was seemingly taken only as a challenge, and *unwanted* guests found other ways in. They jumped the fences, broke windows into student rooms, and found ways into the SAC.

The next year, 1990, students and administrators were in full agreement that Interhouse should not happen. The high school students showed up anyway the second and third Saturdays in November, but left without incident when they saw that the houses were quiet.

Flogging a Dead Horse

Almost immediately, plans were made to find alternatives to Interhouse. The result was called Party Gras. All seven houses contributed work. The theme was a joint effort of a group of people from all the houses. Party Gras took place in both Blacker Courtyard and in the Filipino Courtyard (the area between the Coffeeshouse and the SAC game room). A good number of people went, but it did not evoke the same feelings of bonding as Interhouse did. The next year (last year) Party Gras did not make return engagement.

Individual houses have had their own Interhouse-like parties. Ruddock has had its OPI party third term for each of the past two years and, last year, Page and Blacker each had an Interhouse-type party on the same Saturday in the middle of November. All of these were reasonably elaborate and came off without incident.

With this behind it, the IHC began talking at the beginning of this term about the possibility of having a seven-house party much closer to Interhouse than anything that had happened since. This year's senior class was the last class to witness Interhouse in any form, so concerns were expressed that, if it did not happen this year, Interhouse would be lost completely.

After Rotation, the IHC decided to try to plan a seven-house party and began composing a detailed

proposal to be given to the relevant administrators. It was decided that an intermediate step towards a real Interhouse would be the best choice. The following is a summary of their proposal, taken from its cover letter. It is addressed to Director of Residence Life Kim West, Dean Rod Kiewiet, Associate Dean Barbara Green, Vice President for Student Affairs Gary Lorden, Manager of Security Hal Ginder, and all other interested parties, and is dated October 26, 1992.

According to this proposal, parties would be held in the South House Complex (Blacker, Dabney, Fleming, and Ricketts) on Friday, November 13, 1992 and in the North House Complex (Lloyd, Page, and Ruddock) on Saturday, November 21, 1992. Thus, on either night only one of the two housing complexes would need to be secured. On the nights of the parties, the involved Houses would lock and post security guards at all entrances including those leading up from the SAC or the North House basement. No one, including House members, would be allowed into the House except at one pre-determined entrance. At this entrance, a student would be posted along with the security guard to verify that people trying to enter the House do indeed live there. Restrooms designated for use by party guests would also be located near this entrance. Attached are maps of each of the Houses detailing which areas would be accessible to party guests and where security would be stationed.

The proposal was first brought to Kim West, who thought that it was "very well-written" and that the IHC "had jumped through all the right hoops." She expressed concerns about safety of students, security, crowd control and alcohol, but was willing to work on these problems with the IHC. However, she did caution the IHC not to spend too much time on it since she was fairly certain that the higher-ups would not approve it.

On Monday of last week, Kim West, David Wales, the two Deans and the IHC met to discuss the proposal. Everyone was supportive of a big social event. Elsewhere in the administration, though, things were not as rosy-looking. Jim Minges, head of Business Services, told Ben Smith that he could not be convinced that Interhouse was a good idea. Hal Ginder, head of Security, told Mr. Smith that, although



photos from Tech archives

Above: An automobile adorns the roof of the Hard Rudd Cafe during Interhouse in 1988. Left: A scurve makes his way across the flooded Ricketts courtyard in 1987; the water was approximately four feet deep..

he'd never had problems with the students, he did not like the thought of having Interhouse. Finally, the IHC asked Mr. Smith to talk to Gary Lorden. Dr. Lorden asked for some time to think about it, and either would not or could not meet with the whole IHC. He met with the Deans, the MOSH, and the DRL. Kim West apparently lobbied hard for the two multi-house parties. Lorden made his decision.

The next day, Tuesday of last week, Ben Smith received a phone call during which he was informed that he would meet with Dr. Kiewiet instead of Dr. Lorden. Dr. Kiewiet told Mr. Smith about the meeting with Lorden, the MOSH, and West, and gave Lorden's answer: not only was the proposal denied, but a policy had been set forth for other multi-house parties. Any number of houses could jointly plan a party to be held in a single house's courtyard, but

the number of different courtyards in which parties could be occurring simultaneously was two

What Went Wrong

Dr. Lorden's main reason for vetoing the proposal was that he was extremely worried about not being able to control outside people. Like Minges and Ginder, he has a strong emotional association with the "bad" Interhouses of 1988 and 1989 which overcame even the stipulations in the IHC's proposal that "there would be absolutely no advertising off-campus" and that "if it became known that anyone had been advertising inappropriately, the parties would be rescheduled immediately."

It seems that another reason for the failure to get a multiple house party approved may be the fact that it was organized as a major step towards the return of Interhouse and that, as a result, got to Lorden at all. If three or four houses had just submitted separate party proposals to Kim West, she might have been able to approve them. West said

that, by going through the proper channels, the IHC "drew more attention to themselves than was helpful to planning a large party."

"Now what do we do?"

Feelings are strong on both sides in the aftermath of the Interhouse affair. Mr. Smith had been told by a number of students that, while they had previously perceived an improvement in student/administration relations, they now feel things are going further downhill. People had worked hard to make something happen, giving Interhouse dealings priority over their midterms, and feel a huge disappointment. They wonder, "Now what do we do?"

Kim West said that "the students and the administration, and the students and me, don't work together like we ought to." She feels that "students have to be willing to work with the administrators closest to them," and that, if the gap between her and the undergraduate body could be narrowed, great things could come of their relationship.

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continued from page 10

Interhouse

Possible Solutions and Opinions

There is a great struggle on the part of the undergraduates with the decision of how to react to all of this. My personal feeling is that we should do our best to preserve the ideals of Interhouse without the actual entity, while really doing our best to work with administrators on what steps can be taken toward having a real Interhouse again. I was encouraged by my talk with Kim West. She is tired of fighting the adversarial attitude of the students, but would very much like to reverse that and start working with people on Interhouse and other issues. She suggested that we "let this die down, start with a smaller event and build out way back up," that Interhouse "ought to be for us, for the undergrads," and that we should deal with it in terms of "the undergrad community, not the Caltech community."

I believe that it is possible, and necessary, to achieve some of these goals. I think the key to this is attempting to work with Gary Lorden. Efforts must be made on both his part and ours to strengthen our relationship, if possible, and to attempt to come up with a policy less restrictive than the "two courtyard maximum" policy. Students should make themselves open to the idea that people like Kim West, David Wales and the Deans are trying to work with us, not against us, in most cases. A re-evaluation of the role of the Residence Life Office has been proposed. We must think about what our opinions are and what we want to put in to that process. Lastly, the houses themselves should make a conscious effort to plan Interhouse-like parties within the system as it currently stands, both to perpetuate familiarity with and desire to have a real Interhouse and to promote the sense of cohesion that comes of working with one's housemates on a large-scale project.

A party on even close to the level of Interhouse is not possible this term, nor even, in all likelihood, this year. It is of the utmost importance that Interhouse remain on the students' agenda, though. Whether or not we can keep the ball rolling will be the test to see if we have what it takes to work with the administration and improve the quality of our lives and the lives of Techers yet to come.

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SPORTS

Cross Country Team Goes to Prado Park Conference

Andrew Zug

The mighty beaver cross country squad traveled to Prado Park on October thirty-first to race against those other wimpy schools in our conference. This race was very important for the overall conference standings so everyone was pumped up.

The men's course was over a flat, grassy course still wet from the morning dew. At the start of the gun Ned Bowden took off to lead the charge, but by the second mile Andy Zug had taken over and was pulling away. Zug eventually finished in 28:04 and took seventeenth place. Racing behind him was Ned in thirtieth place. Schuyler Cullen and Francisco Gutierrez stayed close to each other the entire race until Schuyler used his strength to pull away at the end. Senior A.J. Lavin finished out the scoring by placing

forty-third. A noteworthy performance was given by Tom Dmukauskas who finished the race despite having breathing problems that started before the halfway mark and continued to the end.

Overall, the men spanked California Lutheran University and La Verne to place sixth in our conference. This marked the first time since I came here that we did not finish in last place. Congratulations are to be given to Zug whose performance gave him second team All-Conference honors.

Our women's team ran excellent races. Aimee Smith led the charge with Amy Hansen close behind. These two seniors placed twenty-eight and twenty-ninth respectively over the three mile course. Amy's finishing kick left three other runners in the dust as she did her best imitation of Carl Lewis in the 100m. Also coming through were Virginia

Garcia, Tristy Kibbey, and Fatima Ebrahim who ran strong the entire way.

With their top runner out for the race due to a temporary loss of sanity, the women finished last in a tight race. Thanks to their performances during the season the women did tie for sixth in the conference.

By the time most of you read this, the men's and women's teams will have left for San Francisco to race in the Regional meet at Mills College. It promises to be an interesting road trip if not a strong race. This meet will mark the end of the cross country season for everyone.

This Week In Caltech Sports

Men's Football		
11/14	1:00 PM	vs. S.F.V. Nomads
Men's Water Polo		
11/13	TBA	SCIAC Championship
at Whittier		
11/14	TBA	SCIAC at Whittier
11/15	TBA	SCIAC at Whittier
Cross Country		
11/13	10:00 AM	NCAA Regional at Mills
College		
11/20	12:00 PM	NCAA Regional at TBA

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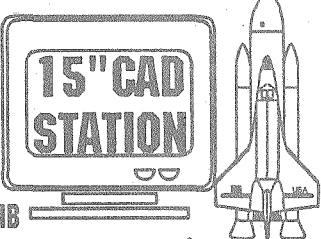
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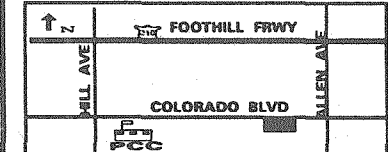
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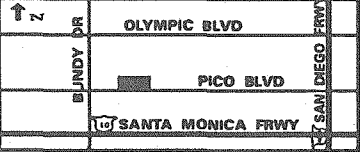
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WHAT GOES ON

NOTICES

Pre-registration Correction - The topic of Lit108b, Seminar in Creative Writing, winter term is Fiction, rather than poetry, as appears in the Registrar's course offerings.

Get a C.L.U.E. Frosh! - Undergrads, if you have not picked up your copy of this year's C.L.U.E., get it now in the Dean's office. They will only be available until Thanksgiving. Even if you don't know what the C.L.U.E. is, get one anyway - you'll want it come pre-reg!

Attention BS and MS Candidates - The 1993 B.S./M.S. Resume Book will be published soon. Resume books are used by employers to recruit entry level employees. To include your resume, submit a good quality copy of your 1 page resume to Rennie by Tuesday, November 24.

Caltech Film Club - The Caltech Film Club holds meetings every other Wednesday in SAC room 25 at 8 pm. For further information contact Alex Protopapas.

Hold The Date! - Auditions for the upcoming Winter musical will be held on Saturday and Sunday, November 21 and 22. We want students actors, singers, technicians, musicians and more. Start preparing. For more information call Elizabeth x2935.

Earthquake Response Team - Security needs student volunteers for an Earthquake Response Team. Call x4701 8am-5pm Mon-Fri.

Alternative Transportation Incentives - Caltech offers alternatives to driving, including reserved carpool spaces, monthly cash incentives for carpool groups of three or more, RTD bus subsidies, computer carpool matching service, and a Vanpool Pilot Program featuring monthly cash incentives in the planning stage. To participate call Caltech Commuter Services at x3203.

EVENTS/SERVICES

Friday Prayer - Prayers organized by Caltech Muslim Students are held in the Caltech Y lounge at 12:30 pm every Friday.

Caltech Hillel/Jewish Community Weekly Meeting - An informal gathering, every Thursday at noon in the Y lounge. For information call Caty Konigsberg at 213-259-2959

Mass - Thursday at 8:15 in the Y lounge and Sunday at 10 am in Winnett lounge. Sacrament of Reconciliation (confession) is given 20 minutes before masses. Refreshments are served after mass.

Bible Study and Discussion - Every Wednesday at noon in the Y lounge. Bring your own lunch. For more information call Mike Gerfen at 356-4886.

Gay, Lesbian, Bisexual Support Group - Meets the second and third Tuesdays at 7:30 pm in the Health Center Lounge. This confidential meeting is open to all Caltech community members looking for a supportive context in which to address questions and concerns about sexual orientation - including coming out, being out, self-discovery, coping with families.... We begin with a focus topic but move to whatever is feeling most relevant to the group that night. Refreshments are served. For information, please call 356-8331.

Adult Children of Alcoholics - A 12-step group meets on campus every Tuesday, from 12 noon to 1 pm, in "Club Room Two". The group is open to any student, staff or member of the faculty who grew up with family alcoholism and other problems. For more information call Dinah Lee Schaller at 356-8331.

German Club Coffee Hour - Please come and speak German with us. The first meeting of the German Club Coffee Hour is from 8:00 to 10:00 pm on November 19 in the Dabney Lounge. Cookies and drinks are served. Please note that all Club's activities are reserved for members only. Anyone interested in receiving a free membership, please contact Prof. Andreas Aebi @ 3620, aebi@iago, or T'Nghia Vuong @ tnilsv@hamlet. Future meetings, movies and other activities to be announced.

Al-anon members needed to facilitate start up group on Caltech campus. Please contact Caltech Staff & Faculty Consultation Center at x8360.

Caltech Duathlon - The Caltech Duathlon/Triathlon Club will host a duathlon at the Rose Bowl (corner of Seco and West Str.) on Saturday, November 21. The distances will be 5k run, 30k bike, 5k run. It is free and open to all members of the Caltech/JPL community. Food and drink will be provided. Registration is at 9:30 am and the race starts at 10:00. Transportation from the gym is at 9:00. Call Andrew Zug at 577-2772 for more information.

Open Line - Open Line meets every Tuesday in the Y lounge upstairs during lunch, between 11:30 and 1:00. Topics discussed include developing a youth center for ages 5-12 for tutoring services, activities and cultural development for the children of Caltech students, staff and faculty, developing a multicultural book for the understanding of all nationalities, traditions and customs. Open to all of the Caltech community.

The CIT-KNIT Group meets at noon on Tuesdays in the Benioff Conference Room (Rm. 256S. Mudd). For all levels of knitters. Come and join us.

Preschool Playgroup - The Caltech Women's club sponsors structured activities for mother's, father's and their children, on Tuesday, November 3 in the Caltech Villa Apartments, from 10 am to noon. For further information contact Valerie Murray at 287-8960.

Baby Furniture Pool - The Caltech Service League loans out baby furniture to students and postdocs on Wednesday at 324S. Chester from 10 to 11 am. For more information call 952-1631.

ENTERTAINMENT

Mudeo - It's time to figure out who the real wimps are. The Freshmen and Sophomore Mudeo Sports Spectacular is coming up. Mudeo 1992 will be held Saturday November 14 behind the Athletic field at 1:00. Frosh and Sophomores are welcome to come and participate. Everyone else is welcome to come and watch. There'll be free food and drinks. Some of the events to look forward to are bat races, mud volleyball, tug-o-war, mudding the Junior Class President (if you can), and many other exciting and rewarding mud-related activities. So come on out and play or come on out and watch. Just be sure to come on out. If you don't know what Mudeo is, ask an upperclassman. For more info, call me (Stanley Grant III) at 578-9923 or Moeen Abedin at 578-9837.

Golub-Kaplan-Carr Trio, Beckman Auditorium, 3:30 p.m. This Coleman Chamber Music Concert will feature Haydn's Piano Trio in C Major, No. 3, Martin's Fantasy on Irish Folk Songs; and Dvorak's Trio in F minor, Op. 65. Admission is \$21.00-\$18.00-\$15.00-\$12.00, the first 50 student tickets are free with Caltech Student ID. (limit two per ID.) Tickets available at the Caltech Ticket Office, 356-4652.

CYBORG WEEK - Now that elections are over, are you suffering withdrawal from plastic people? S.P.E.C.T.R.E. will try to assist with its presentation of skin jobs, androids and cyborgs. We start with "Blade Runner" and "Westworld" 7:30pm Tuesday November 17th in room 35 of the SAC, where refreshments will be served. We conclude with two pair of ultra-violent cyborgs in "Terminator 1&2" and "RoboCop 1&2" to be shown starting at 7pm Saturday November 21st in the Catalina III Rec Room. Please call Gorm @ 568-9168 with any questions. **Israeli Folk Dancing** - Sundays in Winnett lounge, Beginning instruction starts at 7:30 pm, intermediate at 8:00 and open dancing goes on from 8:30 to 10:30. For information call Nancy Macmillan at 795-3655. Admission is \$2.00.

Scottish Country Dancing - On Wednesdays in Dabney Lounge from 8 until 10 pm. Beginners are welcome and no partners are needed. For more information call David Hills at 354-8741.

International Folk Dancing - Tuesday nights in the Dabney Lounge. Beginning instruction starts at 7:30 pm; intermediate at 8:00 pm and open dancing takes place from 9:00 till midnight. Donations are accepted for more information call Mike McKenna (310) 692-0366.

The Pasadena Folkdance Co-op offers beginning and intermediate instruction every Friday at 7:45 pm in Throop Unitarian Church on the corner of Los Robles and Del Mar. A program of varied international dances follows the instruction at 9:00 and continues until 11:00. Wear soft-soled shoes. A contribution of \$1.50 is requested.

Music with James Boyk! - Pianist James Boyk gives a performance each Wednesday from 4:30 to 6 pm in Dabney Lounge. The performance is open to the public and free of charge. Feel free to come late or leave early. For more information call x6353.

California Generations - At Beckman Auditorium on Friday, November 13 at 8 pm. This presentation features the performing arts traditions of native, immigrant, and ethnic groups of California. Admission is \$22.50, and student and senior rush tickets at \$7.50 are available from one half-hour before the performance. (800)423-8849 or (818)356-4652. Individuals with a disability: (818)356-4688.

LECTURES/SEMINARS

"NASA - The Challenge Ahead" Dr. Shea, retired Senior Vice President of the Raytheon Company and adjunct professor at MIT, will discuss issues facing NASA in the areas of space science and application, advanced technology, and launch vehicles. Program begins at 5:00 pm, Thursday November 19, von Karman Auditorium, JPL. Refreshments served at 4:45 PM.

Introduction to B&W Exposure class will be given by Anand Sivaramakrishnan of Dark Room Users Group on Sunday, Nov. 15, at 2pm. Meet by the Dark Room. Contact Alex Zeyliger, x3739, or Tim Shoppa, x4256. drug@cco.

SCHOLARSHIPS, FELLOWSHIPS & COMPETITIONS

USA Today - USA Today is beginning its annual search for the nation's best college students. Sixty will be named to USA Today's 1993 All-USA Academic Team. Chris Ho won last year. The twenty first team members will receive a \$2,500 cash prize and their awards in a ceremony in Washington D.C. Winners will be selected by a panel of judges who will select students excelling in scholarship and leadership roles on and off campus. For copies of the application form send your campus mail address to editors@tech.caltech.edu.

The Future of Computing - The Institute of Electrical and Electronic Engineers Computer Society, NCR Corporation and Computerworld magazine are sponsoring a \$60,000 international essay contest on the future of computing. The contest is open to undergraduate and graduate students. First prize is \$10,000 and a NCR notebook computer. For more information, send requests and campus mailing addresses to editors@tech.caltech.edu.

Fritz B. Burns Prize in Geology - Undergraduates in the division of Geological and Planetary Sciences are encouraged to apply. The award(s) will be made up to \$1,500 for the best proposals for undergraduate research in the fields represented by the Division. If interested, submit a short statement (less than one page) describing the research you would like to do. The submission deadline is December 1, and they should be sent to Professor Kerry Sieh, Division Academic Officer, Division of Geological and Planetary Sciences, Mail Stop 252-21.

The Rotary Scholarship allows juniors or seniors study abroad at the graduate or undergraduate level for one year after graduation. Tuition, travel, room and board are paid along with a living allowance. Awards can be worth more than \$18,000! Juniors, seniors, and graduate students may apply. To find out more attend an information meeting on Tuesday, Nov. 17 in room 26 of the SAC. Please call Lauren Stolper at x2150 if you would like to come. All applicants must be under 30 or under by July, 1993. Applicants must not be a spouse, child, grandchild, sibling, employee, or member of Rotary. Applicants must come from a country in which there is at least one Rotary Club.

The Harry S Truman Scholarship Foundation awards scholarships to college students who have outstanding leadership potential, plan to pursue careers in government or elsewhere in public service, and wish to attend graduate school to help prepare for their careers. Truman Scholars participate in leadership development programs and have special opportunities for internships and employment with the federal government. In 1993 up to 85 Truman Scholars will be awarded on the basis of merit to junior level students at four year colleges and universities who have extensive records of public and community service are committed to careers in government or elsewhere in the public sector, wish to influence public policies, have outstanding leadership potential, and possess intellectual strength and analytical abilities. A Truman Scholarship provides up to \$30,000. If interested, please contact the Dean of Student Office, 102 Parsons-Gates for further information. The deadline for completed nomination materials is December 2, 1992.

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

The annual Mensa Scholarship Essay Contest is here again. The essay should present clearly and concisely the applicant's academic, vocational and career goals. The only requirement is that the student be enrolled in at an accredited college/university for the 1993-1994 academic year. All entries must be postmarked on or before January 31, 1992.

The Korean American Scholarship Foundation is offering \$1,000 scholarships to full time students of Korean American heritage enrolled in at least the second year in a four year college, graduate school, or professional school. Deadline for the application, including supporting documents, is January 31, 1993.

The Society for the Advancement of Material & Process Engineering (SAMPE) is announcing its 1993 Undergraduate Awards Program for Engineering. Application packages must be submitted postmarked no later than February 1, 1993.

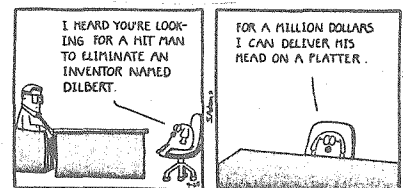
The Society of Women Engineers is seeking qualified applicants for thirty-one scholarships varying in amounts from \$1,000 to \$4,000. Applications, including supporting materials, must be postmarked no later than February 1, 1993.

The American Society of Naval Engineers is a sponsoring a \$2,000 scholarship for the 1993-94 academic year. The candidate must be a U.S. citizen, demonstrate a genuine interest in a career in naval engineering, and be applying for support for the last year of a full-time program or for one year of graduate study. Financial need may also be considered. Deadline for receipt of scholarship materials by the ASNE offices is February 15, 1993.

The American Physical Society (APS) is offering \$2,500 scholarships to African-American, Hispanic-American, or Native-American undergraduate freshman or sophomore students majoring in Physics. The deadline to submit completed applications to APS is February 26, 1993.

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The American Scandinavian Foundation of Los Angeles will distribute five \$1,000 scholarships in 1993 to upper division and graduate students with a demonstrated interest in Scandinavia. Applicants must have strong academic qualifications and must show financial need. Two letters of recommendation, a transcript and the completed application are due by March 15, 1993.



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