The California Tech

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The Caltech Project

Survey to map Caltech social network will be out to students next week

By Sarah Marzen

Staff Writer

Caltech Professor Jean Ensminger has spent the past thirty years mapping the social network in an East African village. Now, she has turned her eye towards a completely different culture: the Caltech undergraduate population. Next week on Tuesday, all Caltech undergraduates will be asked to take an anonymous survey that will be used to map the undergraduate population's social network.

In the survey, students will be asked to name friends and answer questions about personal values. The resulting database, although stripped completely of the individuals' names, can be used to investigate everything from the effect of religion on social networks at Caltech to the role that Houses play in shaping individual preferences.

That's just the start of it-- Ensminger plans to roll out the same survey for ten years, all the while building an unusually comprehensive database. She has named this entire endeavor "The Caltech Project."

"I don't want to oversell this as completely unique, but I think it has the potential to be a very powerful data set, in large part because we have this very unique population," said Ensminger. "But even if this were a mundane university population, this would be an interesting data set. Social network analyses have never been done this thoroughly with this many variables."

However, there is a potential stumbling block in all of this. A low response rate would make the database "shaky". Ensminger hopes for a 90% or better response rate from the Caltech undergraduate population.

"In the kind of social network analysis that we're doing... anyone [undergraduate] named by somebody as a friend must be surveyed," said Ensminger. "You can cope with a less than perfect response rate, but if it gets too low... you get holes in the social network analysis that are going to be problematic because we won't know what we're missing."

Dabney House President Andrew Price finds the social network map interesting, but is skeptical that undergraduates will be able to find ten minutes to complete the survey. "It's worth a shot, but you won't get a very high response rate," said Price. "Students are apathetic."

See ANTHROPOLOGY on pg. 6

Eco-Rotation, an Experiment to be Implemented This Fall

By Daniel Thai

Contributing Writer

Acting upon the recommendations proposed by the ad hoc Rotation Review Committee, Vice President of Student Affairs Anneila Sargent has decided to implement eight changes to next year's Rotation, pending the resolution of logistical difficulties.

This included a change to the picks process, called "Eco-Rotation", in which "houses that fail to attract sufficient rankings from incoming students will shrink" and eventually disband, according to the Final Report from the ad hoc Rotation Review Committee.

"I will implement Eco-Rotation this fall," said Sargent.

"The short form is that if this eco-system with its new boundaries, [...] doesn't work, we will have to look for another solution, which may introduce more tightening of regulations than we are doing at the moment," she said.

The seven other changes recommended by the ad hoc Rotation Review Committee are designed to increase awareness of Rotation policies and/or prevent Rotation policy violations.

These changes and the ad hoc Rotation Review Committee's formation were prompted by "a spate of disciplinary violations and complaints about the events surrounding Rotation, on top of some long term concerns about the environment in the houses," occurring in Fall 2009 according to the final report.

"There were a great many complaints about the process of rotation," said Sargent. "I heard it from Alumni and from Faculty, and the Administration."

According to the Chair of the ad hoc Rotation Review Committee Paul Asimow, Rotation 2009 had both Rotation Rule violations and policy violations, including a possible hazing incident, harassment incident, fire policy violations, and an alcohol policy violation. The distribution of violations "was not uniform" across Houses, said Sargent.

"Some of them [the violations] were serious enough that Anneila bypassed the Conduct Review Committee and handled them administratively," said Asimow. "Student Affairs ran out of patience this year."

For example, Ricketts House burned a giant penis in their courtyard during Rotation, according to former Ricketts House President Nick Rosa. No

See ROTATION on pg. 5

Caltech Takes First Place at the Pasadena Collegiate Field Tournament

By Tina Ding

Editor in Chief

It's noon, Saturday April 3rd, and the sun is scorching down the grass fields of the Rose Bowl. Anthony Chong and Robert Karl are intensely engaged in the Monster Croquet final, whacking the giant polka dot beach ball, which is three feet in diameter, towards the other side of the field with PVC pipe "racquets". They pass the center of the field, where they can see The Art Center team making their way towards their goal on the other side of the field. The balloon arch goal at the end is close, closer, and WHAM! Roaring applause and shouts burst in the air as approximately 180 Caltech spectators rose and cheered loudly for their school that just took first place in the first game of the Pasadena Collegiate Field Tournament.

"I never saw anything like this," said Tom Mannion, Vice President of Student Affairs and the Caltech Team Coordinator, "Students were jumping up doing chest slams."

Last Saturday, Caltech competed and took first place in the first annual Pasadena Collegiate Field Tournament. The event was thrown by the City of Pasadena, to showcase the seven Pasadena colleges by pitting them against each other through a series of fun interactive outdoor games and activities conducted on the emblematic Rose Bowl. The six Pasadena colleges Caltech, Pasadena City College (PCC), The Art Center, Fuller Seminary, Pacific Oaks, and the Le Cordon Bleu College of Culinary Arts were judged in seven activities. The activities were the uniform design, Monster Croquet, Blind Faith, Best Cheeseburger, Frisbee, Puzzle, and Meteor Catch.

Caltech snatched first place in uniform design, Frisbee, Best Cheeseburger, Puzzle, and Giant Croquet. The Einstein uniform consisted of white curly hair wig, glasses, mustaches, and orange uniforms. In Frisbee, according to Tom Mannion, the Caltech team threw them 20-30 yards farther than all the other schools.

Meteor Catch was suppose to be the event that was dedicated to Caltech, consisting of devising the best method to catch potatoes, water balloons, tennis balls, and other random objects launched by slingshots or thrown by people. The Caltech team made a sheet out of heavily attached duct tape. However, the placing results of the Meteor Catch are unknown.

Second, third, and other placings are also unknown, according to Mannion. The judges only announced the first place winner. "The school spirit was unbelievable," said Mannion. "If I have really high expectations, I would have still exceeded them."

The colleges were fully rep-

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Decker Advances to NCAA Fencing Finals

By Rick Paul

Sports Editor

Laura Decker became the first Caltech fencer to qualify for the NCAA Fencing Championships in five years after she finished second at the NCAA West regional last month. Her inspired performance won her an all-expenses-paid trip to Harvard University to compete in the most prestigious college fencing tournament in the country. Over the span of the two day event, Decker held her own against athletes from traditional fencing powerhouses such as Harvard, Penn State, and Ohio State. "The nationals were the biggest tournament I've been to," said Decker. "Overall, it was a great experience. Beating Allison Miller from Ohio State was exciting, but my best match was against Duke's Rebecca Ward. She's the only fencer on the planet ever to hold five world championships simultaneously. And I lost by one point."

What makes her achievement even more amazing is the fact that Decker did not start fencing until she arrived at Caltech. "My roommate Vanessa Burns, who fenced while she was in high school, got me into the sport. Most people at these tournaments have been fencing since they were ten years old, but almost all the athletes on Caltech's team did not start fencing until college. We're all united in not knowing what's going on." When asked for what her secret to success was, Decker answered, "I fence three days a week during the school year and over the summer I worked on my footwork all the time." She also credited much of her success to the tutelage of second year head coach Michael

See FENCING on pg. 6

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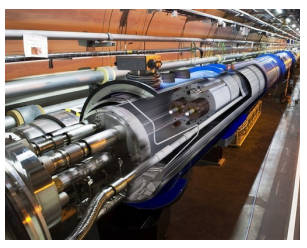

LHC Scores Big!

The Not-So-Great Society: How a Moderate President Bought Healthcare for All

By Evans Boney
Contributing Writer

Many have hailed President Obama's recent Healthcare Purchase as something Progressive and wonderful, like Medicare, probably because Obama's White House office seems very intent to pretend these two things are the same. After all, this was the largest single government expenditure on Medical Expenses, so how could Obama's Great Society help but be just as Great if not better than LBJ's?

Well, duh Obama... it's because you didn't actually use all of the government spending to help people. Sure, Medicare is being abused, but at least it didn't start out by mandating everyone purchase private healthcare. Social Security didn't send everyone to their local Charles Schwab. This Healthcare bill, and its new society, is not so great because it doesn't have as its primary achievement cutting costs. It has, as its achievement, covering people with private healthcare.

Now is that a Great Society? Nope, it's just a huge healthcare purchase. This comes with enough new regulations on insurers (and jobs to enforce them) that I don't think it's necessarily terrible, but Jesus, why do we think private insurers know how to run healthcare? The internet has been used by everyone for over a decade, and yet my doctor still needs me to remember the last time I had a vaccine? That's an embarassment, and Obama still hasn't taken them, or doctors, or anyone to task for not keeping public health at the top of their agenda. He has rewarded them with the biggest government contract of all time, and that is to his discredit.

To his credit, he passed something. After 15 months, he finally pinched a major loaf of legislation down the toilet of congress. What an embarrassment to democracy here though right? Was anyone really proud of their country that day in congress? Or just relieved that we finally had a congress that did something, anything. I know that I just felt relieved: that congress did something besides steroid hearings and fundraisers.

LBJ, had he been around today, would have seen to it that a public option made it in the bill (hell, he might have pushed for single payer in this environment), and he would have passionately argued for its passage even if it meant his own re-election failure. Obama, cool as you like, spent all of 2 weeks delaying vacations to eventually ram this worm-infested bill through the assholes of congress. Why not do that earlier... before all the goddamn worms?

Forgive me for not calling this Healthcare Purchase a Great Addition to the Great Society. I call it the Not-So-Great Society, defining a complacent President's acquiescence to the status quo over his campaign promise for change.

The California Tech

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A Letter to the Editor

IHC 'Joke' In Poor Taste

I am writing to express my disappointment with IHC Chair Tim Black's decision to e-mail the undergraduate community with poorly chosen April Fool's joke. As some of you may recall, we received an e-mail on the 1st indicating the creation of a "Science Review Committee" , one that is"... being formed as a part of a stipulation of a federal grant, and is part of a nationwide program that is looking at science." The message goes on further to say "Additionally, within the last year, some labs have violated a number of Caltech policies, including the fire policy and harassment policy, and some new researchers have felt uncomfortable."

Does Mr. Black feel that our fire and sexual harassment policies are fodder for a joke? Should our elected student leaders act in such a way? In an attempt to redact his previous message, Mr. Black sent out another e-mail the next day, saying "Perhaps my message was too subtle...". Or perhaps it should not have been sent to begin with.

Travis S.

IHC

Weekly Meeting - Dabney – April 2, 2010

Present: Tim Black (chair), DK Lim (Avery), Chris Whelan (Blacker), Andrew Price (Dabney), Alex Lapides (Fleming), Lucas Hartsough (Lloyd), Paul Fleiner (Page) Will Steinhardt (Ricketts) Dan Kolodrubetz (Ruddock), Laura Conwill (secretary)

Guests: Daryl Coleman, Sarah Li, Michelle Ton, Dan Thai

Cheese
Tim brought cheese, Wisconsin's major export. He points out that it is far better than California cheese.

Ricketts-Ruddock Transaction Saga [final installment]
Will's 30-cent check to Dan might bounce. If it does, he'll write a new one.

Dean Search Committee
The IHC has finalized its recommendations for the Dean Search Committee and has submitted these names to Anneila Sargent.

Resident Guide to Institute Housing
Alex, Andrew, and Tim talked to Peter about the Resident Guide to Institute Housing. In general, people will be able to keep their pets; Peter is still working on the phrasing of the pet rules. The $100 fine for staying in lounges is for people who are squatting (coming in early and staying there before checking in), rather than for people who have a room but are spending the night in the lounge.

Blacker Interhouse
Blacker Interhouse is next Saturday, April 10. A vote was taken to determine who was okay with Blacker Interhouse staying up a week later than usual, because Prefrosh Weekend will prevent it from being able to be taken down. Everyone is okay with this.

Committee Interviews
Interviews are coming up; next week are the sign-ups for Steward Committee Chair, Food Committee Chair, and Interhouse Ath Man. The following week will be the sign-ups for all of the other committees. Interviews for these committees will be conducted in two sessions.

IHC Meeting Times
This term, weekly meetings will be held on Thursdays.

Changes to Board Plan
Residents of Marks and Braun are now required to be on board; this will be brought up at the next meeting with Anneila.

Prefrosh Friday
We're going to see about letting the prefrosh stay for dinner.

Submitted by Laura Conwill
IHC Secretary

Guidebook, or a Mishmash of Tour Guides?

Book Review of *Guidebook for the Scientific Traveler: Visiting Physics and Chemistry Sites Across America*

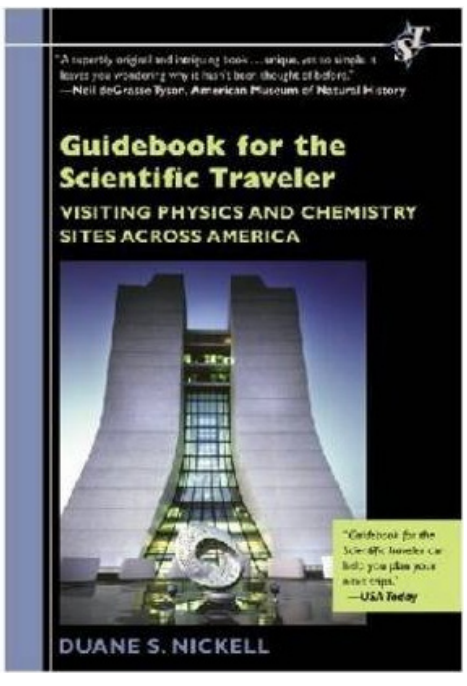
By Edward H. Chen

Have you ever wanted to skip an art museum for a planetarium show, or even a tour of a power plant? Then this guidebook may be for you. It may not have any maps, but it can enrich a tour of America's most interesting science scenery nonetheless. The science in this guidebook is explained in an understandable manner, and the pure science is mixed with an appropriate dose of perspective on the societal impact of the scientific breakthrough.

The author, Duane S. Nickell, was motivated to write this book after conducting a scientific tour of Europe. He realized that "no scientific guidebook existed for the United States". American science is often touted as the best in the world, and yet there aren't very many books that spell out where the greatest scientific achievements took place in this past century. This book is one of only a handful on Amazon that avid travelers can use to wisely choose which locations are worth visiting.

When I started reading the book, I pretended that I had never been to the Pasadena area, but had heard about the California Institute of Technology, the United States Geological Survey and the Jet Propulsion Laboratory in the news every once in a while-- that way, I was able to see clearly what kind of slant Nickell brought to the table.

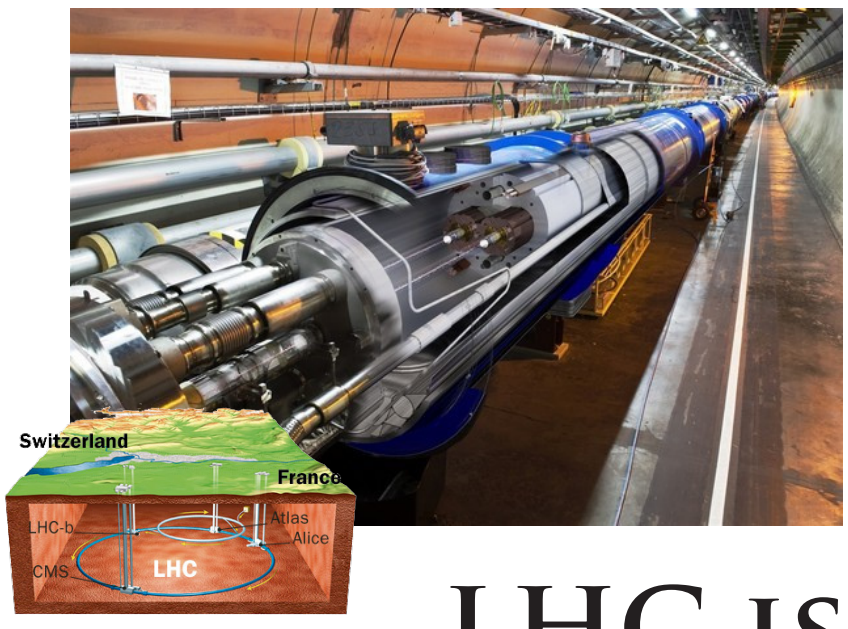
He starts the section about Caltech with an explanation of the mission set forth by our founders (Noyes, Millikan, and Hale) and then he suggests a "self-guided" walking tour that "begins with a stop at the President's residence". In fact, the structure of the other sections follow this same guideline—Nickell presents the landmark as if the reader were taking a tour from a well-rehearsed tour guide. While he discusses the physics research going on in Bridge, Kellogg, and Sloan, I find it odd that he fails to mention a single contribution that Caltech has made in chemistry! About halfway through this Caltech review, he explains that the nose of Robert Millikan's bust is rubbed "for good luck before exams" by the students. At this point, I realize that some content in this book is nothing more than a transcription of what a visitor would hear from a student tour guide on campus.



Fortunately, what makes this book useful is that it does a great job in stringing together the tour-like information of all these historical sites along with the scientific theories. This was definitely not an easy feat since he was also able to cover sites in 30 of the 50 states in 242 pages. In addition to covering Universities and National Labs, he was also able to cover various topics in four separate chapters: "Particle Accelerators", "Nuclear Weapons", "Energy", and "Chemistry in Industry". The physics and chemistry endeavors of the past and current century have revolved around these major areas. Choosing these topics demonstrate a strong understanding of what a "Scientific Traveler" would find interesting.

I would recommend this book to an independent backpacker from Europe, a high school student who's taken a bit of physics, or even an entire family that may be interested in taking a day, or even a month to go exploring the country for scientific landmarks. The author provides well-digested content of the established scientific theories while pointing out the obvious fact that all up-to-date maps and modifications can all be found online. All in all, the tone of the book is not as pedantic as a high school teacher, and not as droning as a tour guide. He definitely didn't win the "Presidential Award for Excellence in Science and Mathematics Teaching, the nation's highest honor for science and mathematics teachers" for no reason.

http://rutgerspress.typepad.com/rutgers_university_press_/2008/11/do-you-love-visiting-the-planetarium-are-you-fascinated-by-the-history-of-nasa-is-seeing-the-northern-lights-on-your-l.html



LHC is Back in the Game

by Neha Samdaria

After $10 billion and 25 years of anticipation, the Large Hadron Collider (LHC) came back with a bang last Tuesday as it finally began smashing protons together at 99.99% of the speed of light. Word is, the whooping, hollering and heat-butting in CERN, Geneva (and other labs around the world) is only just beginning to die down. To scientists, this marks a major breakthrough in a project which aims to answer fundamental questions about the universe, but many of us still wonder why this is such a big deal. I mean sure, the LHC made a history last week, after it successfully collided two protons together at energies more three times the highest levels previously recorded…, but why does even this matter? What's the big hubbub about the LHC anyway, and why is it worth taking notice of? How exactly is it going to improve my life in the future? Well, here is a primer on the importance of this project – with enough information, hopefully, to get you to take notice of it next time it is brought up in a late-night conversation at coffeehouse, or splashed across the page of a newspaper.

Trying to explain how a machine makes infinitesimally small particles collide at speeds close to the speed of light and at temperatures indicative of those in outer space is no easy task. But here is a very basic description:

Two beams of protons travelling in opposite directions are accelerated to nearly the speed of light (through the use of magnets) and circle the ring over 11,000 times/second, while passing through a series of detectors. The two main detectors are the Compact Muon Solenoid (CMS) and the Atlas. When two particles collide, they emit a burst of energy; the new particles and their energies, paths and identities are picked up by these detectors. Two of the other detectors in the LHC include: the LHC-b (which hunts for the differences between matter and antimatter) and Alice (which is used to study heavier ion collisions).

Straight from the expert: Prof. Harvey Newman

A little background on the LHC:

The LHC is a particle accelerator that collides protons at the highest possible energy. So far, it has reached 7 TeV, which is about 3.5 times higher than the energies of previous collisions such as those generated at the Fermi Lab in Chicago.

What the scientists working on the LHC project hoping to discover:

By creating these collisions, we can search for new physics processes, new constituents of matter, new signs of forces and also learn about the nature of space-time - incase there are extra spatial dimensions. Because the energy reach is much higher than anything before, there are a wide range of exotic possibilities of what we might see. And so, as time goes on, we accumulate more data, and the intensity of the machine increases so that the number of interactions per second increases, we have increasing reach for seeing new physics.

Because the previous collider has run for many years already at lower energies, what we will be doing in the first part of the program from now on, is confirming what we think we know about the standard model of particle physics. Also through standard model processes, to help us understand our detector, we will carry out calibrations and align some of the subsystems so that we have full performance. Although I have to say that even in the first days, the performance of the detector was surprisingly good!

The most conventional things that are talked about in terms of possible new physics or things we haven't seen yet are, first of all, the Higgs particles, thought to be responsible for mass in the universe. But if we only see the Standard Model Higgs, then it will be something of a disappointment, because we know that it is incomplete in various ways. For one thing, with the standard model alone, we can't make the connection to the early universe and the nature of matter in the universe at large. The other thing is that if we project the strengths of the four interactions that we know about back to the early universe, the standard model doesn't give us unification.

Beyond the Standard Model..

Beyond the standard model, the next most likely scenario, or one of the most compelling scenarios, is called supersymmetry, in which every known particle has a partner which differs from it in ½ unit of spin. The reason we wouldn't have seen any of these supersymmetric partners is because we presume that they are very heavy. Going to the energies of the LHC, we are able to search for these particles in a heavier mass range than was previously possible.

The LHC community

So we have different members of our group and there are students working on these different areas of physics; all pursuing different avenues to discovery and at the same time, helping us to fully understand our detector, calibrate it, and maximize our potential for discovery.

The progress that has been made

We have done a lot of special things in our experiment, both in terms of physics and technology. In physics, we have two major areas. One regards signatures which include the appearance of high energy photons.

The second one involves invisible particles which show up in the detector as missing energy, and in particular, missing energy which is perpendicular with respect to the beamline. This is one of the most powerful ways to search for super-symmetry and my colleague Maria Spiropulu is working particularly in that area together with her students and post-docs.

In terms of technology, there is a worldwide computing model that was invented by me in 1999 which is now the means by which groups around the world collaborate on this experiment and process the data locally, in part, and have people in many locations directly involved in the process of doing data analysis and getting at the possible new physics.

Working overseas, I also tackled the problem of international networking for our field and wanting to understand how to do that, we developed networks through several technology generations. We now operate the transatlantic network between the United States and CERN that serves our field. It is one of the biggest networks, not only in academia, but of anyone in terms of capacity. We also have the greatest knowledge of how to transfer data over long distances at high speed that anyone has. Early in the process of learning that, we worked with Professor Steven Lowe in Computer Science and Electrical Engineering. We also developed global systems that can monitor, help manage and potentially steer the data flow and other aspects of operations among all the sites.

What about societal impact?

The development of accelerators has had a big impact on industry. They have helped characterize atomic and molecular structure which has been useful in the development of drugs. They are also widely used in Materials Science and Industrial Processes. Medical accelerators, of which there are thousands, are used for treatment and diagnosis. Then of course, we have the big example of the World Wide Web which was actually developed by a Summer Fellow.

I learnt firsthand, that the ability to control global systems is something that very few people can do. So that clearly will have a very big societal impact. One of the most important non-technical things is that we learn how to collaborate without borders and to create an organization which is not strictly hierarchical. I mean, we do have a leader, an elected spokesperson, but it's not really so strictly hierarchical, and yet we're very effective, and at the same time, we can work across borders so we have members from 40 countries.

Caltech's contribution

We were also very active, for example in the first data taking that occurred last week. We got the first major result, which was just to show the peak from the decay of Pi0's into two photons. Another thing about our group which is kind of special compared to other institutions, is that we have a great involvement of undergraduates in our research

The best part about working on this project

It has taken many years to get to this point, and so this is a really special point. We don't know what we're going to see, but because of the increased energy, we're very confident that we're going to find something. So that's an unusual situation in science – knowing that we're almost certainly going to see something and we don't know what it is!

Interesting Facts

Particle Accelerators are used to dry the paint on soft drink cans

Both x-ray techniques and radiotherapy for cancer patients were developed by particle physicists.

In October 2003, CERN and Caltech set a new Internet Land Speed Record by transferring 1.1 Terabytes of data in less than 30 minutes across the transatlantic. This is equivalent to transferring a full length DVD movie in 7 seconds.

The collisions in the LHC generate temperatures more than 100,000 times hotter than the sun.

The tunnel has its own fire brigade and the firemen are well trained in abseiling and rope rescue techniques in case there is ever a tunnel emergency.

Protons in the accelerator travel at approximately 99.99% of the speed of light and have an energy equivalent to driving at 1,056 miles/hour in a Honda Civic.

"Angels and Demons" by Dan Brown features a catastrophic situation when terrorists steal antimatter from the LHC and try to use it to destroy the Vatican. This terrifying story became so well-known that CERN had to issue a FAQ on the subject, answering questions such as " Does CERN exist?" "Does it consist of red brick buildings with white-frocked scientists running around carrying files?" and "Can we make antimatter bombs?"

The Eco-Rotation Experiment

ECO-ROTATION FROM PAGE 1

one else commented on this or other specific violations during rotation.

"My problem is that there is a considerable body of opinion that this is not the appropriate way to populate the houses, and it's in the minutes of the Faculty Board meeting that there are a considerable number of faculty who don't think that rotation should continue," said Sargent. "It has the elements for some of [a] fraternity/sorority rush. That, I have heard over and over. Now the proponents, let's say the IHC, and they believe it, say this is how [they] believe that each frosh finds himself in a housing situation that they find palatable."

Eco-Rotation

According to the final recommendations of the ad-hoc rotation committee, eco rotation would "end the fixed quotas of incoming students assigned to each house, such that houses that fail to attract sufficient rankings from incoming students will shrink (first by losing an off-campus alley, eventually by losing an alley within the physical house itself, and finally by disbanding);" According to Dr. Paul Asimow, the head of both the rotation committee and the Student Housing Committee (SHC), "We want to make it clear to the houses that the face they put forward needs to be attractive to on order of 1/8th of the freshmen."

Under the new system, during the first year, each house would choose two alleys to be "at risk," one inside the physical house, and one outside the house, such as Page's "Holly" or Ricketts "Hazard." During roompicks, upperclassmen would pick into both at risk alleys normally, but with the understanding that they could be forced to live elsewhere.

If a house is extremely popular, then some of the upperclassmen who live in the in-house-at-risk alley would move off-campus to accommodate the increased number of freshmen, and the additional freshmen would move into the vacated alley.

Contrariwise, if a house is extremely unpopular with freshmen, then one of its off-campus alleys could be either made unaffiliated, or even donated to another house, according to Asimow. The upperclassmen living in that alley would then move back on-campus where they would fill the spots normally filled by freshmen.

If a house was unpopular in a second year, then its off-campus alley would be returned to it. However, an alley physically inside the house would be taken away, and again made unaffiliated or donated to another house.

Similarly, for a third year of unpopularity, the house would lose both an on-campus alley and an off-campus alley; both would be made unaffiliated, or possibly given to popular houses.

If a house was unpopular for a fourth year in a row, it would be disbanded. Although it is uncertain what disbanding would entail, Professor Asimow speculated that this could involve dissolving the house leadership or having freshmen or upperclassman "colonize" a house. Geoff Blake stated that they might bring in a "broader range" of people to reseed a house.

According to Nick Rosa, former president of Ricketts house and a committee member, Tim Black, the current chair of the IHC, proposed a different system for dissolving houses. Under Black's system, the house would simply not take any freshmen. This would open up significant amounts of off-campus housing, which would then be occupied by other houses, not by freshmen. The IHC chairman stated that he disliked all methods of reseeding or dissolving houses, but declined to comment specifically about his own proposal.

According to Dr. Asimow, in practice, there are two phases to the current picks process. At first, the process reflects students' preferences, and they are more likely to get into houses they rank highly. As soon as the remaining number of frosh who ranked a certain house sufficiently high is equal to the number of slots remaining in that house, those freshmen are placed in that house to fill that house's quota. Under the new system, Dr. Asimow hopes that this second phase would be greatly reduced. ""That part at the end of the picking process [under eco-rotation] either disappears altogether, or affects a much smaller number of people."

Exactly how unpopular a house would have to be in order to lose its off-campus alley or activate this second phase is still under discussion. According to Assistant Vice President for Student Affairs, Tom Mannion, a committee will soon be formed which will discuss a "trigger mechanism". A trigger mechanism is a set of conditions on rankings, which if satisfied cause a house to lose an alley. This committee will include the deans, the IHC, the Vice President of Student Affairs, the Assistant Vice President for Student Affairs, and the Assistant Vice President for Housing and Dining.

"The short form is that if this eco-system with its new boundaries, [...] doesn't work, we will have to look for another solution, which may introduce more tightening of regulations than we are doing at the moment," Vice President Sargent said.

Committee Procedure

The Committee's charge was very broad. "I told them [the IHC] that the only way forward was to [have] a committee consider to have rotation changed, modified, or no rotation," said Vice President Sargent. "Everything was on the table."

Sargent chose the head of the faculty Student Housing Committee, Professor Paul Asimow, to head the committee. He in turn chose the members of the committee.

"I biased this membership to basically ensure that we get rotation [as opposed to other choices]and get it so that it works," said Asimow. To achieve this objective, he chose faculty members who were alumni of the houses. He also choose alumni faculty to try to "avoid the likely outcome," that the student members and the faculty members disagree.

The committee proceeded to investigate the different freshmen House assignment methods of Administrative Assignment, Freshman Choice, Status Quo with tweaks, and Delayed Rotation, as well as eco-rotation. Administrative assignment was eliminated early on as a choice, because, according to Dr. Asimow, only one member of the committee favored administrative assignment. Members were then assigned to four sub-committees, corresponding to the remaining four options.

Sub-committees determined the best option amongst possible variations of their topic, and then reported back to the full committee. For example, the Delayed Rotation committee settled upon a 1 term delay as being optimal amongst the different Delayed Rotation options.

The committee ultimately decided to adopt the proposal of the eco-rotation committee, with a few of the suggestions of the status-quo committee.

According to Dr. Asimow, the committee settled on eco-rotation because it provided incentives for houses to not exaggerate their character during rotation, while still retaining some of the advantages of the current house system, particularly that freshmen generally like the house they were placed into even more than their first choice.

For further information, readers are encouraged to look at:

Preliminary Recommendations of the Rotation Committee.

http://oof.caltech.edu/fac_board/09-10/RotationCommitteeFacultyBoard020810.pdf

Minutes of the faculty board where the recommendations were presented.

http://oof.caltech.edu/fac_board/09-10/02-08-10%20Faculty%20Board%20Minutes%20revised%2004-02-10.pdf

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You may contact the reporter at dthaiger@gmail.com.

Supplementary Information

Option Name	Principal Components	Reasons for Rejection of Proposal
Administrative Assignment	-All freshmen would be assigned to houses by the administration. -Squelches Houses Cultures at a stroke	-Contrary to self-governance -Likely to interfere with support
Delayed Rotation	-Committee settled upon a 1 term delay. -Students would spend an entire term in a house before choosing houses. -"Delayed Rotation has many potential advantages and should be recommended in the future if problems persist"- Final Recommendations of the *ad hoc* committee.	-Prevents houses from acting as support system first term. -Prevents freshmen from participating in House social events first term -Does not address policy violations or unwelcoming strategies
Freshmen Choice	-End house meetings and move to a system of Freshmen choosing. -Considers Anthony Chong Algorithm.	-Students prefer secrecy of process to minimize hard feelings afterward -Loses apparent "wisdom" of current system, whereby freshmen like their actual placement better than the initial top ranking.
Status Quo with Tweaks	-Keep Current rotation process more or less unchanged.	-Insufficient to overcome original concerns. -Houses intentionally projecting offensive images. -Concern about mandatory participation in potentially stressful social events.

Source: Preliminary Recommendations of the *ad hoc* Rotation Review Committee, unless otherwise specified.

Other changes:

- Hold mandatory meetings for both incoming students and upperclassmen participating in Rotation to remind them of relevant Institute policies.
- Maintain orientation groups that rotate together and meet at least once during Rotation with their upper class orientation counselors; may help students to leave uncomfortable situations and yield timely information about problems.
- Ensure that incoming students are aware that they may leave Rotation events at any time.
- Prohibit Alcohol at all Rotation Dinners.
- Limit attendance at Rotation events to current students
- Ensure that incoming students are aware of the availability of on-campus, non-House living situations.
- Set up the orientation schedule for new students such that Rotation can begin by lunch on Thursday, allowing four full days of Rotation unencumbered by the beginning of classes.

THE CALTECH PROJECT

ANTHROPOLOGY from PAGE 1

Using the survey

This term, twenty-five undergraduates in Ensminger's An150 spring term class are already formulating hypotheses about Caltech's social networks that they can test using the data. However, no undergraduates will actually be allowed to see the raw data for fear that they might identify individuals in the network.

"We've been exceedingly attentive to anonymity," said Ensminger. Not even Professor Ensminger or her graduate students will be able to see individual names attached to raw data. Instead, a computer will assign proxy ID numbers to all the survey takers, throwing away all names entirely.

Even stripped of names, undergraduates will not be permitted to interact with the raw data set. Instead, an undergraduate will ask Ensminger or her graduate students to run certain statistical tests on the data, and the undergraduate will only see the aggregate statistics.

Ensminger declined to comment on what she expects to see from the social network analysis. "We don't usually want the subject pool to be polluted before we do a survey and students have yet to formulate their hypotheses," said Ensminger.

This is the second class in which undergraduates have heavily participated in designing the Caltech Project. Last year, An142 designed a large portion of the survey used in the Caltech Project.

"It was an incredibly productive term," said Ensminger. "I learned so much and the pilot was so helpful."

Ensminger is already entertaining plans to track Caltech alumni, which could open up an entirely new goldmine of data.

Past research

Although the survey is only rolling out next week, Ensminger has been interested in studying the undergraduate culture for a long time. "I became interested in the Caltech population when I first arrived on campus," she said. "I had the concept for this class eight years ago."

However, Ensminger was busy with several other projects and responsibilities-- she was the Division Chair of HSS from 2002 – 2006 and has more recently begun to write a book on corruption, inspired by her social network findings in Kenya.

Decker Advances to NCAA Fencing Finals

FENCING from PAGE 1

D'Asaro.

Decker does not appear to be resting on her laurels just yet. She is planning to compete in the upcoming Summer National Championships of the USFA (United States Fencing Association) held in Atlanta, Georgia. As the largest fencing tournament in the world, the event hosts approximately 4,000 individuals over ten days.

Caltech Wins Pasadena Collegiate Field Tournament

PASADENA TOURNAMENT from PAGE 1

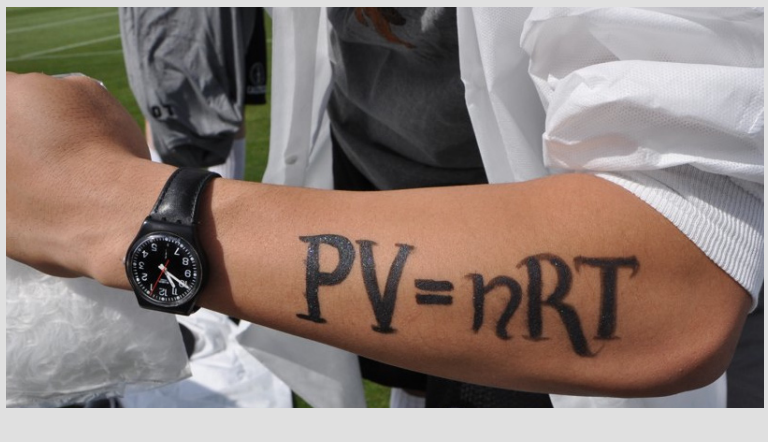
resented in all games, although Caltech had the highest number of spectators.

"It was nice realizing that we were part of a bigger Pasadena college community," said Anthony Chong, Captain of the Caltech team who also sang the national anthem at the event.

According to Mannion, a PCC student approached Carol Carmichael, the First Lady of Caltech and Faculty Associate in Engineering and Applied Science, and asked if Caltech can prank PCC in the future. "All the schools had a great time," he said.

The City of Pasadena contacted Caltech a few months ago with idea for this event. Over the last months, Mannion met with the city and other colleges to plan the event and finalize the date. "It was such a success that I expect we will have this [event] in the future," said Mannion.

Photographs courtesy of Bob Paz and Anthony Chong



Student Athlete of the Week: Ram Kandasamy (Men's Tennis)

1. What is (are) your major(s)?
Ram: Computer Science and BEM

2. People will be surprised to know . . .
Ram: I didn't eat beef until I came here. Now I can't stop eating it.

3. Favorite place to eat on the road?
Ram: Subway, $5 footlong.

4. Favorite book?
Ram: The Count of Monte Cristo

5. Describe your sport in 3 words?
Ram: confidence, determination, strategy

6. What teammate has inspired you the most?
Ram:
Rico Chiu, he's an assistant coach now, but he played 4 years. He knows so much about the game and is very observant and helpful.

7. Favorite quote?
Ram: "Everybody wants to be a bodybuilder but nobody wants to lift no heavy ass weights" -Ronnie Coleman

8. Where do you get motivation from when things get tough?
Ram: My dad. He worked his way from a village in India to become successful in the US, and he's truly an inspiration.

9. If you hadn't come to Caltech where would you be now?
Ram: Probably at UC Berkeley.

10. Who is your favorite player at Caltech, any sport?
Ram: Nnoduka Eruchalu, although he needs to get back on the track team and show he's still the fastest.

Caltech Men Pull of Best Performance of the Season at SCIAC 4-Way Meet

April 3, 2010

Alex Lapides took first place in the High Jump against CMS, Cal Lu, and Redlands with a season best of 6'-4". He also ran the 110HH for the first time in his collegiate career and took 1st place against Cal Lu, 3rd against Redlands and 4th against CMS with a time of 17.09 moving him on the 2010 SCIAC Top 10 list.

The 4X100 relay team made up of Lapides, Brice Nzeukou, Kyle Martin and Mitchel Arene ran a season PR with a time of 43.55 beating their previous best of 44.42, a time that moves the relay team up to 4th in SCIAC this season.

Brice Nzeukou ran a lifetime PR in the 100m with a time of 11.22 and finshed 1st against Cal Lu, 2nd to CMS, and 4th to Redlands moving up to 5th on the season's SCIAC Top 10 list. He also ran a lifetime PR in the 200m with a time of 23.01 moving him up onto the SCIAC Top 10.

Kyle Martin ran PRs in the 100m and 200m with times of 11.52 and 23.97, respectively.

Kunmi Jeje ran PRs in the 100m and 200m with times of 11.78 and 24.35, respectively.

The Weekly Scoreboard

April 3, 2010
Men's Tennis vs. Cal Lutheran L 0-9
Women's Tennis vs. Cal Lutheran L 3-6
Men's Baseball vs. La Verne L 0-10
Men's Baseball vs. La Verne L 2-18
Women's Water Polo vs. Occidental L 1-19

Upcoming Games

Wednesday, April 7th
5pm W Water Polo @ CMS

Friday, April 9th
3pm Baseball vs Cal Lu
5pm W Water Polo vs. Chapman

Saturday, April 10th
9am Track & Field @ Pomona Invite
9:30 W Tennis vs Oxy
9:30 M Tennis @ Oxy
11am Baseball @ Cal Lu
11am W Water Polo @ Whittier
2pm Baseball @ Cal Lu

Wednesday, April 14th
7pm W Water Polo vs Pomona-Pitzer

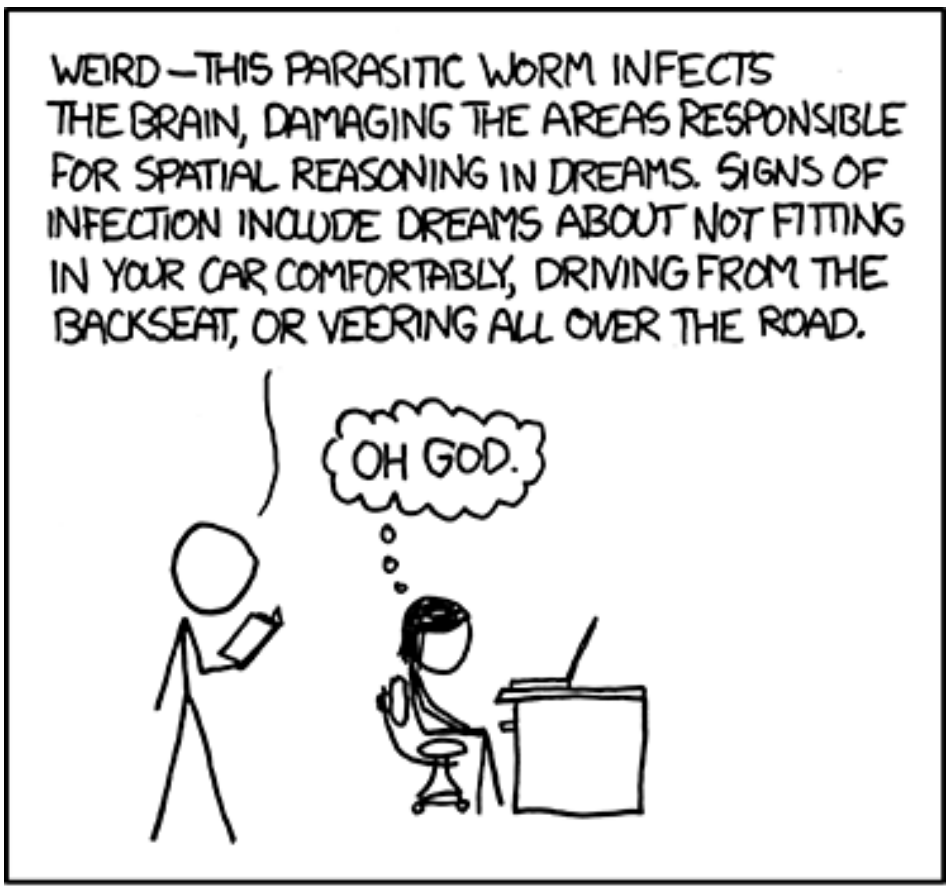
Weekly Weather Report

Day	Conditions	High/Low	Precip. %
Tuesday, April 6	Sunny	74/51	0
Wednesday, April 7	Sunny	83/54	0
Thursday, April 8	Sunny	83/54	0
Friday, April 9	Sunny	74/53	0
Saturday, April 10	Partly Cloudy	69/51	10
Sunday, April 11	Mostly Cloudy	67/49	10
Monday, April 12	Showers	69/50	40

The DO's... ... and DON'Ts of Interhovse Parties

	Boy Says	Girl Says
DO	Be welcoming and outgoing, meeting and socializing with new people.	Shower.
DON'T	Stand in a closed off group consisting solely of guys.	Substitute the water with Axe.
DO	Have a good friend introduce you, put in a good word, and be ready to swoop in to save you at opportune times.	Attempt to dress nicely.
DON'T	Have your drunken friends swear that you saved all of their lives by performing the Heimlich maneuver when they were all choking on the same chicken bone.	Wear a white suit and later change into a sweater vest with nothing on underneath.
DO	Break the ice with an interesting and entertaining comment or question.	Try and talk to girls.
DON'T	Offer to play a guessing game, and then proceed to "guess" her name, house, major, birthday, and favorite band.	Ask out a girl standing next to the girl who just rejected you.

	Boy Says	Girl Says
DO	Hold an interesting and engaging conversation with her about topics you're both interested in.	Know that if she runs away, she is not playing hard to get.
DON'T	Serenade her with your original composition, telling her how she made you feel when you saw her picture on Donut for the first time.	Stand two inches behind her while she is dancing and expect her to back up into you while you dance like a baboon in heat.
DO	Go on the dance floor, and get bucked and crazy as if you don't have a care in the world.	Make an attempt to dance with a girl instead of staring at her from the perimeter of the dance floor.
DON'T	Stand on the dance floor having awkward conversations.	Expect your original rap to serenade her into your den of love.



XKCD by Randall Munroe

Weekly Horoscope

(Mar 21 - Apr 19) Aries Today you realize that the only solution to the real equation you are studying involves imaginary numbers.	(Apr 20 - May 20) Taurus This week, your GPA will continue to fall, as will your self esteem.	(May 21 - June 20) Gemini The BOC is onto you, expect Andrew Price be to watching you at night.	(June 21 - July 22) Cancer This week you will realize that Stalin achieved more of his 5-year plans that you have.
(July 23 - Aug 22) Leo The next week, your spam folder will be more interesting and applicable than your inbox.	(Aug 23 - Sept 22) Virgo You will soon realize your student loans do actually need to be repaid.	(Sept 23 - Oct 22) Libra You base case does not work, and your induction does not either.	(Oct 23 - Nov 21) Scorpio This week, you will try a new place in Pasadena, only to realize they are too expensive.
(Nov 22 - Dec 21) Sagittarius This week, you will realize that Southern California has both snow and surf, but you have seen neither.	(Dec 22 - Jan 19) Capricorn For this week, think about Newton's second law: for each action you do, you go further away from your goals.	(Jan 20 - Feb 18) Aquarius Bring a poncho to dinner, you are going to get floated this week.	(Feb 19 - Mar 20) Pisces Try to build on your previous successes: go back to high school.

The California Tech
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