Rosenbaum inaugurated as Caltech’s ninth president

NEERA SHAH
Editor-in-Chief

Dr. Thomas F. Rosenbaum was inaugurated as Caltech’s ninth president on Oct. 24. The festivities took place over two days, beginning with a panel discussion on Oct. 23.

“The Science and the University-Government Partnership” panel was open to the public; Robert J. Zimmer, president of the University of Chicago and member of the National Science Board, led the discussion on future directions of science and its evolving relationship with government, industry, and private philanthropy. Everyone was also welcome to attend the inauguration convocation and the all-campus reception that followed.

The inauguration ceremony began with a processional led by Fiona A. Harrison (chief marshal, chair of the presidential search committee and Benjamin M. Rosen Professor of Physics), Konstantinos P. Giapitis, (convocations marshal and professor of chemical engineering), and eight Nobel laureates. David L. Lee (PhD ’74), chair of the Board of Trustees, presided over the ceremony. The Caltech Convocation Brass and Perussion Ensemble, directed by William W. Bing, lectured in concert band and jazz band, played during the processional.

...time to unveil the D...

On Oct. 1, Elon Musk tweeted “...time to unveil the D...” Unlike previous mysterious tweets, the substance of this one was guessed reasonably quickly. Two years after the release of the revolutionary current Model S has only one

motor, and the fastest version, the P85d, does 0-60 in a start, lumbering 4.2 seconds. If there’s none are cargo, and none are seat five with

seconds. But

one thing everyone can agree on, it’s that this is embarrassingly slow. More seriously, the dual motor approach is more efficient at a range of speeds and forms an important test of the powertrain for the upcoming Model X crossover.

The new model looks the same but can reach 60 mph from a standing start in 3.2 seconds, pulling an average of 0.9 gs. The number of road-legal cars that can do this can be counted on one hand.

There’s the Bugatti Veyron and a handful of other supercars which cost in excess of a million dollars. There are a few electric one-offs, (less than a year since starting) progress with car autopilot. Rather than aiming for complete autonomy, like Google or the DARPA grand challenge, Tesla has decided to pick a bunch of cheaper, more versatile sensors, then gradually upgrade the software that translates their input to control. Tesla’s sensor array includes GPS, forward-looking radar, omnidirectional ultrasound (sonar), and a forward looking camera. In combination, they work well enough to hold or change lanes, perform adaptive cruise control, check for cars or objects in blind spots, recognize speed limits, and automatically brake the car to avoid a collision. It remains to be seen how well this system works in practice, or how effective it actually is in combating driver fatigue and

Continued on page 4

Robert A. Millikan’s head is placed on Thomas P. Rosenbaum as part of the tradition for inaugu-

rating presidents.

Photo Courtesy of Michael Wong

Tesla Motors announced the Model P85D in October.

-teslamotors.com

On Oct. 1, Elon Musk tweeted “...time to unveil the D...” Unlike previous mysterious tweets, the substance of this one was guessed reasonably quickly. Two years after the release of the revolutionary

Tesla unveiled progress with their autopilot system and sensor array with features such as forward-looking radar.

- extremetech.com

The California Tech

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Caltech Y Column

The Caltech Y Column serves to inform students of upcoming events and news in the community. The list is compiled by Neera Shah from information given by the Caltech Y and other sources.

More information about the Caltech Y and its programs can be found at https://caltechy.org. The office is located at 305 S. Wilson Avenue.

Upcoming Events:
1. Mt. Baldy Hike
   - Sunday | November 4th | 8:00 PM

2. Flying Blind:
   - Reproducibility in High Energy Physics

   - Wednesday | October 29th | 12:00 to 1:30 PM

3. Caltech hosts range of events for inauguration

   - Continuing from page 1

   - Undergraduate students to welcome Dr. Rosenbaum and his wife Katherine T. Faber, who is joining Caltech as the Simon Ramo Professor of Materials Science in the Division of Engineering & Applied Science, to the university. Sanita Darbe, chair of the Graduate Student Council, spoke on behalf of the graduate students. Representing Caltech alumni was Samantha Foster (BS ‘98), president of the Caltech Alumni Association, who ended the welcoming remarks as she said, “Today, our family grows by two, and we could not be more pleased.” The keynote address was delivered by Don Michael Randel, chair of the board of the American Academy of Arts and Sciences and president emeritus of the University of Chicago. He is also president emeritus of the Andrew W. Mellon Foundation and has served as provost of Cornell University and as dean of Cornell’s College of Arts and Sciences. His background is in music; he earned his bachelor’s, master’s, and doctorate degrees in music at Princeton University.

   - In his speech, Randel focused on the importance of education, touching on the necessity of investment in education, the current state of education in the United States, and how Caltech contributes to it. Commenting on a trait that Caltech values in its students, Randel expressed the importance of curiosity in Caltech students and was enthusiastic about the lead a university of students that are always pushing the boundary between the impossible and the possible.

   - The traditions observed during the inauguration ceremony date back to the 14th century. According to David Elliot (1917-2007), Caltech professor of history, emeritus, the cap or mortarboard is a sign of the master, while the gown is “the basic liviery of the scholar” and different sleeves distinguish between the bachelor, master, and doctor. The color in the main body of the hood identifies the university, while the color of the binding indicates the subject of the degree (e.g., orange for engineering, gold for science, blue for economics, and white for arts and letters).

   - A tradition unique to Caltech inaugurations is the passing of Millikan’s academic hood to the new president. Millikan was the administrative head of modern-day Caltech, but never officially assumed the title of president. He also was Caltech’s first Nobel Prize winner. This tradition began with the inauguration of president emeritus Harold Brown in 1969.

   - The inaugural address was followed by the performance of the Alma Mater “Hail CIT,” led by the Caltech Glee Club. The recessional led to the all-campus reception on the Olive Walk, where there was a variety of food available (such as Bola tea, mini sliders, and fruit) and a live band (The Draw) played music as attendees celebrated the new president.

   - The traditional college song “Geaudeme Igitur” was performed by the Caltech Glee Club after the keynote address and before the investiture of the president. President Rosenbaum gave his inaugural address after Robert A. Millikan’s academic hood had been passed on to him. In his address, President Rosenbaum also stressed the importance of curiosity in Caltech students and was enthusiastic about the lead a university of students that are always pushing the boundary between the impossible and the possible.

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Duo strikes a balance in hip-hop album *Run The Jewels 2*

**NAILÉN MATSCHKE**
Contributing Writer

Just about anyone who listens to hip-hop regularly is aware of the waves that Run The Jewels has been making since dropping their eponymous debut in 2013. The duo composed of rapper Killer Mike and rapper-producer El-P, has been able to pull off straightforward, hard-hitting tracks while still remaining innovative. This is largely due to El-P’s particularly electronic-influenced production style, taking the core rhythmic patterns typical to East Coast hip-hop and presenting them in a bass-heavy, distorted, and still well-balanced package, leading to music that I’m pretty sure would be almost as fun to play as loudly as possible even if every verse was utterly terrible. Fortunately, neither Killer Mike nor El-P is a slouch in their respective crafts, so Run The Jewels has to reach an almost aggressive style of the latter as the two trade technical ability of the former and the more aggressive style of the latter as the two trade verses on pretty much every track they’ve ever released.

The single most successful quality of Run The Jewels has been their ability to produce eminently entertaining and enjoyable music for even casual fans of the genre, although there is no doubt that the hype for Run The Jewels 2, their second release, has hit a massive wave within the community in the past few weeks. After three universally successful singles demonstrating that Run The Jewels knew what fans wanted, the surprise release of the album as a free download on Oct. 24 was almost too good to be true. Fortunately, the album does not disappoint.

RTJ opens up with the fantastic introduction of an audio clip of Killer Mike shouting expletive-laden exclamations, before the synths creep up and he begins a minute and a half of bragging that builds from speaking level to yelling. Throughout this, El-P’s production works in some airy bass tone that doesn’t really start making noise, and just gets louder when (there apparently) supposed to be a beat. This is topped with some simple synthesized snare and some sort of bird-song-like sample on loop, and apart from numerous samples that’s all El-P and Killer Mike need to trade absolutely on-fire verses, which are again basically about how great they are. After a couple minutes of back-to-back-to-back rhymes, El-P switches up the beat a bit with some hyperactive percussion and some more chopped-up samples of ambiguous origin, allowing each to exercise some different rhythms in their vocals. While these two artists had a history of collaboration even before Run The Jewels ever existed, it seems as though the synchronicity of their act is only improving with time; these two are on the same wavelength and out to prove that they’re some of the best in the game.

Next up is “Blockbuster Night Part 1,” which serves as another showcase for El-P’s unique but stylistically on-point production, and is topped with some hyperactive keyboard coiniding with a related Killer Mike line. The instruments aren’t the most interesting in the world, but that’s distinctly not the point—they’re loud, angry, and cool, and in a scene that hasn’t seen too many great artists from the East Coast recently it’s refreshing to hear darker and rawer sounds prevalent in Run The Jewels’ music.

Interestingly, the next track, “Close Your Eyes,” features the Rage Against The Machine frontman Zack de la Rocha, and has a beat largely based on a looped sample taken from de la Rocha’s repeated “hook” on-again-off-again variations on “run them jewels fast.” While his verse itself is largely forgettable except for some clever wordplay and subject matter (“the only thing that close quacker than our caskets be the factory”) that makes me wish his former band still existed, it’s nonetheless a good choice for a feature and definitely entertaining to hear.

It’s at this point that the album’s biggest problem becomes apparent, which is that it’s undeniably front-loaded–like I mentioned earlier, the album’s singles so far are just tracks two through four—and while the rest of the album isn’t by any means bad, it’s just not quite as good. There are definitely exceptions, with songs like “Lie Cheat Steal,” my current favorite from the album, for its mix of some of great instrumentals, technically and lyrically impressive verses, and a memorable hook. Moments such as when Killer Mike rapidly spits questions like “Who really run that man that say he run this?” and later suggests “could it be the man behind the man behind the man behind the throne?” are attention grabbing and demonstrate that Run The Jewels isn’t just pandering to its audience.

Even if later tracks such as the politically-charged “Early” or the mellow “Crown” don’t quite bring the same fury of the album’s first half, they also don’t lack in solid rapping and interesting production (especially on the Travis Barker-featuring “All Due Respect”), and are enjoyable the whole way through. The duo isn’t revolutionizing hip-hop any time soon, but Run The Jewels has to reach an almost unmatched level of execution that deserves a listen from any self-respecting hip-hop head.

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**FÉYNSMAN TEACHING PRIZE!!!**

Here’s your chance to nominate your favorite professor for the 2014-15 Richard P. Feynman Prize for Excellence in Teaching! You have from now until January 5, 2015 to submit your nomination package to the Provost’s Office to honor a professor who demonstrates, in the broadest sense, unusual ability, creativity, and innovation in undergraduate and graduate classroom or laboratory teaching. 

The Feynman Prize is made possible through the generosity of Ione and Robert E. Paradise, with additional contributions from an anonymous local couple. Nominations for the Feynman Teaching Prize are welcome from faculty, students, postdoctoral scholars, staff, and alumni.

All professorial faculty of the Institute are eligible. The prize consists of a cash award of $3,500, matched by an equivalent raise in the annual salary of the awardee. A letter of nomination and detailed supporting material, including, but not limited to, a curriculum vitae, course syllabus or description, and supporting recommendation letters should be emailed to kminker@caltech.edu or directed to the Feynman Prize Selection Committee, Office of the Provost, Mail Code 206-31, at the California Institute of Technology, Pasadena, California, 91125. Nomination packages are due by January 5, 2015.

Additional information including guidelines for the prize and FAQ may be found at http://provost.caltech.edu/FeynmanTeachingPrize. Further information can also be obtained from Karen Kerbs (626-395-6039; kkerbs@caltech.edu) in the Provost’s Office.
Continued from page 1

carelessness.

What’s the big deal with Tesla anyway? It’s a relatively tiny startup that makes cars. Fancy, shiny, and extremely expensive cars. There’s one thing cities in the US don’t need, it’s more cars. Given that cars will continue to exist and make modern lifestyles possible, Tesla plans to introduce a cheaper mass market car in 2017, codenamed Model 3. Probably a scaled down Model S, it will rely on mass production and innovative battery construction to lower costs to around the $35,000 mark, which is quite affordable when you factor in reduced cost of ownership. To get there, Tesla is building a battery “Gigafactory” in Nevada. Tesla once chose the 18650 cell to exploit its ubiquity

and availability—today producing 30,000 cars a year, Tesla consumes more than 60% of world supply. Getting battery costs below $100/kWh is seen as essential for their wide adoption, and certainly their use in more facets of life is part of the Tesla/SolarCity master plan. Solar generation can be buffered at every scale in a future smart grid with the introduction of in-home battery packs with incredible and affordable capacity.

In the more distant future, electric propulsion has the potential to revolutionize air transport too. Battery energy density need to improve by a factor of 3 to 10, and powering light planes or even long-haul flights electrically is certainly possible. But more than that—electric motors have a much higher power-to-weight ratio than almost any other type of engine. The explosion of toy quadcopters is a testament to this fact. An airplane with a power-to-weight ratio greater than one is capable of vertical takeoff and landing and, with appropriate turbine design, supersonic flight. For the first time, humans may fly in planes that aren’t immediately analogous to birds.

LORI DAJOSE
Contributing Writer

It’s a common sentiment you’ll find throughout university applications, job interviews, and grant proposals—having a “well-rounded” education is crucial to success. For Caltech undergraduates in particular, this means that in addition to a rigorous and broad spectrum of science and math classes, they must take 108 units of humanities and social science (HSS) classes over four years.

The Caltech catalog states, “Significant study in the humanities and social sciences is an important component of Caltech’s core curriculum, giving alumni the ability to navigate the societal, political, and economic factors that influence, and are influenced by, their work.” Based on a survey of 290 undergrads, many students agree that HSS classes are important. One noted, “This is Caltech; we are supposed to learn the truth about the universe. HSS is a key part of understanding the human experience.”

But while the 12-class requirement is, conceptually, a good idea for a diverse education, 62% of students surveyed said that the requirement should be lowered. However, this isn’t due to a lack of appreciation for HSS—for many students, the courses offered just aren’t meeting their needs.

57% of students said that HSS classes aren’t offered often enough. Out of 28 advanced economics classes listed in the catalog, only seven are offered during the 2014-15 year.

One advanced psychology class is offered, and no advanced anthropology courses. Often, the classes that are offered are quickly filled, forcing some students to cram in HSS classes before they graduate.

For social science, it’s a tricky task for the department to address these complaints and still maintain adequate staff for the three undergraduate options—business economics and management (BEMS), economics, and political science. “BEMS is very popular, and we’ve made staffing it a priority,” commented Professor Federico Echenique, the executive officer for social sciences. “I really wish we could do more.”

With regards to the classes that are offered, almost half of the students surveyed didn’t think they’re diverse enough. In a free-response portion of the survey, a very popular request was for linguistics classes. Many also suggested courses in more specific areas—for example, rather than broad courses on “modern European history,” a course that focused solely on a single war. Several students suggested offering cultural courses, such as gender studies, or Asian studies. For the social sciences, which can often be heavily mathematical and quantitative, some students suggested “applied social sciences.”

One student commented, “It’s interesting to learn about the Black Death, but what I want to know is: how can I prevent it from happening again?”

Another problem students had with HSS classes is the failure to provide a formal writing education. The catalog states, “Writing is an important method for developing and sharing ideas.” But while HSS classes require writing, a number of students feel that they are not being taught how to write. “They always stress the writing aspect in the HSS classes, but I always feel like I get worse at writing after each class,” one student wrote in the survey.

Though the recently reopened Nixon Writing Center offers writing guidance from peer and professional tutors, students prioritizing of science courses often limits the time and energy they have for revision of humanities papers.

Although I think students see advanced hums as refreshing and just as rigorous as science courses, it’s difficult to get them to take writing seriously,” said Professor Cathy Juanca, executive officer for the humanities. To address that, the core curriculum now requires that advanced humanities are taken on grades. While the intent is obviously to incentivize development of writing skills, some students view it as just another addition to an already-demanding workload.

The majority of Caltech students surveyed are not opposed to HSS classes in general. But with a limited selection of courses, balancing the strict 128-unit requirement on top of rigorous scientific focus is frustrating.
This week my fantasy football team killed it thanks to strong performances from Matt Forte and Arian Foster. Also, here is a huge paragraph about some water polo games. The Caltech men’s water polo team against SCIAC rival the University of Redlands on Saturday morning. The Bulldogs came away with the 17-6 victory to make it 5-7 overall and 1-2 in the SCIAC while the Beavers are now 7-3 (0-2).

Redlands got off to a hot start with three goals in the first quarter. Sophomore Chris Bradley (Half Moon Bay, Calif. / Serra) lit up Caltech’s side of the scoreboard just before the end of the first quarter. The Beavers would not net in the second quarter, including Blackwood’s first strike of the day to keep the deficit within two, but even combined with another late Bradley score Caltech trailed 7-5 at halftime.

Blackwood struck again within the first minute coming out of the break, but Redlands netted four straight to end the quarter with the 11-4 advantage and closed out the match with a 6-2 edge in the fourth quarter.

This guy, Jean-Alexander Turban, would eventually kick the ball (not pictured) into the goal (pic taken just before the turn over from the other side) for his team-high four goals to even things. Sophomore Chris Bradley (Half Moon Bay, Calif. / Serra) scored his 100th goal of the season while leading the Caltech men’s water polo team to a thrilling 15-13 victory over Chaffey College in the nightcap after the Beavers fell in their SCIAC opener against the University of La Verne, 17-7, on Wednesday evening.

Both teams took some time to get going in the first quarter, but La Verne struck first just over three minutes into the match. Junior Jim Blackwood (Rancho Palos Verdes, Calif. / Palos Verdes Peninsula) scored the first of his four goals for a 1-0 lead. Patric Eck (Fullerton, Calif. / Troy) followed with a 6-2 edge in the fourth quarter.

La Verne came out firing in the second quarter, and quickly outscored Caltech 6-2 in a 9-2 lead. The Leopards held the four-goal margin heading into halftime, 7-4, and a 6-1 edge in the third quarter sealed the victory as Blackwood and Bradley provided the only offense for the Beavers.

“We were able to execute effectively on offense and generate ample opportunities, but we did not finish enough of our chances,” Head Coach Pat Beemer said.

Caltech 15, Chaffey 13

After a hiatus, here are some water polo highlights

This week's water polo games were a great start to the season. The Caltech men's water polo team took on SCIAC rival the University of Redlands on Saturday morning. The Bulldogs came away with the 17-6 victory to make it 5-7 overall and 1-2 in the SCIAC while the Beavers are now 7-3 (0-2).

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ASCIT Minutes

ASCIT Board of Directors Meeting

Minutes for 19 October 2014. Taken by Sean McKenna

Officers Present: Catherine Jamshidi, Patrick Nikong, Annie Chen, Sean McKenna

Guests: Margaret Lee, Elliot Simon, Chris Dosen

Call to Order: 9:12 pm

President’s Report (Cat):

- Presidential Inauguration (and an Academic Holiday) are occurring on Friday. Dinner will be in Chandler.
- Cat is meeting with the alumni office to discuss student-alumni interactions.
- Student Experience Committee, Faculty Board Committee, Honor Code Committee, and Dean’s Advisory Council meetings are approaching, so Cat may have news at the next BOD meeting.
- Career Fair is happening on Tuesday, October 21st.
- Club Funding is happening on Sunday, October 26th

Officer’s Reports:

- V.P. of Academic Affairs (ARC Chair: Nima):
  - The ARC has selected their new frosh rep
- V.P. of Non-Academic Affairs (IHC Chair: Connor):
  - IHC is meeting with Safety/Housing to discuss fire safety guidelines.
- Director of Operations (Connie):
  - Club registration and club funding deadlines are this week so that club funding allocations can happen on Sunday, October 26th.
  - The little I has arrived! Get one from Connie or a House President.
- Treasurer (Patrick):
  - Any final 2013-2014 club funding that is due to be reimbursed by ASCIT should be submitted to Patrick by Wednesday, October 22nd.
- Social Director (Annie):
  - Houses can start planning Big I, but the administrative details are still being worked out.
  - Annie is exploring weekly trivia nights happening at the Rath instead of at Chouse.
  - Annie is exploring weekly movie nights and her Executive Social Committee.
- Secretary (Sean):
  - ASCIT now has a twitter! Follow @ASCITtweets.

If anyone has any questions or concerns about a section of the minutes please email the appropriate officer. We are happy to answer any questions.

The next BoD meeting will take place on October 26th at approximately 5pm in SAC 15.

Meeting Adjourned: 10:00 pm

CALTECH THEATER offers several chances to branch out and take chances, have fun and expand your social network this fall!

1. Wednesday Nights 730-930 in Ramo Auditorium. Director of Theater Arts Caltech, Brian Brophy (Star Trek TNG, Shawshank Redemption) helps guide you through the fundamentals of Directing/Acting/Writing for the stage (life), to a final production of several ten-minute plays by students December 3, 2014. We still have room for about six more students! Last chance 2014!

2. Playgoing Friday Nights (Next play What the Butler Saw; a crazy fun farce at Mark Taper Forum, downtown Los Angeles November 14, 8:00 PM). First twenty-five receive subsidized tickets at five dollars each! The first outing was the musical Kiss Me Kate at the Pasadena Playhouse last Friday night (October 10) with nearly twenty students and we ate cupcakes from Dots!

3. WANTED: Actors, singers, musicians, technical personnel, and designers for new, original Caltech musical Alice Through the Wormhole! This musical is currently in the development phase with a world premiere run February 20-21, 2015! If you are interested in any facet of production, including script development, contact Brian directly! Next meeting Saturday, October 11th at the Theater Lab 10:30, located behind the Theater Arts House 275 South Hill. Bagels, coffee and snacks will be served!

REMINDER FROM THE COUNSELING CENTER:

Meditation Mob (drop-in mindfulness meditation group) meets every Tuesday Bottom floor of Winnnett from 12:00-12:50 pm

The California Tech

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Hey ladies and gents. Is it just me or does it seem like our terms are really short? I mean, man it's already week 4. That's pretty crazy.

So I saw a flyer for a dating seminar titled “Dating you: Get in the Game” and it got me thinking. The whole dating thing can be sort of complicated especially with the rapidly changing gender roles in society today. Some girls value leadership but then aren’t happy if they end up doing something the guy wanted to do. Some girls think that the guy should be the provider while others say “I’m an independent woman that don’t need no man.” Since we’re talking about nutrition this week I just need no man.” Since we’re talking about calories, specifically what they are and how they interact with the body.

The micronutrients have a negligible contribution to calorie intake. The macros, however, basically are calories. Proteins and carbohydrates both store 4 calories in 1 gram. Fats store 9 calories in 1 gram. At this stage it is important to note that exercise is not the only way to burn calories and in fact isn’t the main source of calorie burn. Simply being alive is a much bigger source of energy consumption. Each person has a basal metabolic rate, which is the rate of energy expenditure by a person at rest. It is a function of one’s height, weight, sex, and age. As an example, a male at 21 years, 5’10”, and 150 pounds has a basal metabolic rate of 1692 calories per day. To be clear about this number, assuming no other activity such as work and maintain current body mass, it is what is required just to survive and maintain current body mass assuming no other activity such as motion.

This brings us into the most popular word when talking about nutrition: calories. For many, eating a 2000-calorie diet is the way they see food. I’ll continue next week with Nutrition Part 2. Hope you guys are almost ready for midterms.

**Photo Courtesy of Brad Chattergoon**

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**Brady Chattergoon**

Contributing Writer

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**Crossword**

The California Tech

**October 27, 2014**

**Feature**

**Higher education**

**Sudoku**
For the first time since 1992, the Caltech sciencing community breathes a sigh of relief: Caltech’s undergraduate dean, the Dark Lord, has vanished. He-Who-Must-Not-Be-Named was supposedly about to discipline a student yesterday afternoon for a reason still unclear, when the dean’s Persona non gratus proof was interrupted, and he mysteriously disappeared without a trace. Current speculation is that the student’s devotion to the Honor Code was so strong that it protected him from the attack and deflected it against He-Who-Must-Not-Be-Named, who is now effectively banished from Caltech.

“It’s really a bizarre ending to a terrible reign,” professor of mathemagic Albert Doubledoor, told The Tech. “While He-Who-Must-Not-Be-Named was never the most powerful scientist or mathemagician, he was very familiar with several proofs, including the Persona non gratus. The Caltech sciencing community is very lucky for this fortuitous event.”

While most Caltech undergrads are celebrating today, some students are still in doubt that they really are safe. The Caltech Astrology Club held a séance last night after hearing of He-Who-Must-Not-Be-Named’s disappearance, and are expected to release their findings shortly. Independently, a small group of professors of alchemy released a statement warning about the potential that the dean was under the influence of a spirit-altering potion. In that case, the dean’s current power has been drained, but his spirit can still find a new body and recover. “Every professor leaves a little bit of their soul in each of their graduate students,” professor of alchemy Nigel Lupus pointed out to us. “That’s an unfortunate side effect of the job. It would be easy to ensure that He-Who-Must-Not-Be-Named was vanquished forever if he had just seven or so students, but there are nearly a hundred students all over the country and the world with a bit of his soul in them. Eliminating all of them would be a nearly impossible task.”

Followers of the Dark Lord, including most of the Department of Political Science, are perhaps the only ones to be disappointed by today’s news. Some are still optimistic, and predict the return of the Dark Lord within the next 20 years, but we aren’t holding our breath.

The Iterated Manifold is a weekly column by Timothy Sinclair. The Iterated Manifold can be followed on twitter @S**tCaltechSays.