

Student Faculty Conference Next Week on 4/18

For the first time in four years, the 2023 Student Faculty Conference will be held in-person on Tuesday, April 18th in Ramo Auditorium. The Student Faculty Conference (SFC) is an all-day forum discussion between students and faculty. The conference is held biennially as a review of Caltech education. The feedback and suggestions that come out of the SFC shape the future of academics.

The main contributor of the event is the ARC. The ARC is the Academics and Research Committee. We are the academic branch of ASCIT. Our goal is to improve the Caltech undergraduate academic experience.

The process of planning the SFC begins in fall. The ARC appoints members of SFC Committees, made up of students and faculty. The committees analyze academics and lead a discussion on their findings at the SFC. Each SFC Committee then works to implement their recommendations and feedback concluding in a short report summarizing their work. The special topics this year are The Effects of COVID on Academics and Rethinking Flexibility in the Core Curriculum. The Special Committee Topics in 2021 were Mental Health in Academics and Scientific Writing. In previous years the topics included Honor Code and Option Advising (2019); Computing Education and Core Curriculum (2017); Teaching Innovation and Writing and Communication (2015). Everyone is welcome and no reservations are required. More information can be found on the Caltech SFC and ARC website. Please fill out the SFC surveys sent to your student emails ASAP!



The Keck/BICEP team poses proudly with their telescope in the 2022 season. Photo credit: Ahmed Mohamed

IMAGING THE BEGINNING OF TIME FROM THE SOUTH POLE

AHMED MOHAMED | SCIENCE & TECH

My research work at Caltech is trying to precisely address the most fundamental questions that have ever been posed by a human being: “How did the universe begin and evolve over time into what we could see today?”

Cosmological observations in the past few decades generally support the theory that the universe is uniformly expanding and cooling down with time, suggesting that if you turn the clock backwards about 13.8 billion years, we could find “the beginning” — time zero — the so-called “Big Bang.” Just as my great-grandfathers, the Egyptian pharaohs, left behind monuments as witnesses for one of oldest and greatest civilizations on earth, so too did the newborn universe with the Cosmic Microwave Background (CMB), its light traveling for billions of years till today as a witness for the universe’s birth.

The CMB radiation was first measured in 1965 by Penzias and Wilson at Bell Labs. It provided strong observational evidence for the Big Bang cosmological model, as opposed to the competing Steady

State theory. However, the Big Bang model failed to answer some questions. Why is the measured CMB temperature uniform everywhere we look in the sky? How did the large scale structures of the universe emerge? Why is the spatial curvature flat? (Yes, science says flat for the universe but not for the earth!)

The theory of cosmic inflation was developed in the 1980s to answer these questions and others. It suggests a period of “inflationary” rapid expansion in the first few moments of the baby universe, as well as primordial gravitational waves that would imprint a unique pattern in the CMB. My PhD thesis work in the Observational Cosmology Group at Caltech, as part of the BICEP/Keck collaboration, aims to develop a very sensitive detector camera. Once built, it will allow a telescope to reach the ultimate sensitivity and search for this very faint pattern left over from the creation of the universe, revealing to us what it was like in the beginning.

(continued on back page)

Staff Spotlight: Sean Cutting, Accessibility Services Specialist

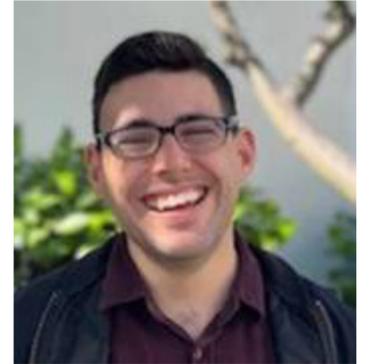
SASCHA GOLDSMITH & MICHAEL GUTIERREZ

According to a recent estimate, more than 250 students at Caltech receive some form of disability accommodation — academic, housing, dietary, or otherwise. The job of granting, bookkeeping, and administering these accommodations used to be handled by the Deans’ Office until the Caltech Accessibility Services for Students (CASS) office was established c. Summer 2018. Its former director, Marc Lazar, worked there from November 2018 through December 2022 before giving his 30 days’ notice, leaving the deans scrambling to find someone else to single-handedly manage the responsibilities of the office.

“The institute is fully committed to the CASS office,” Dean Lesley Nye reassured us in an interview. “We posted the job listing as soon as we knew Marc was leaving.”

For the entirety of the Winter 2023 term, they were only able to find an interim consultant to maintain the CASS email. This resulted in significant delays in several students’ accommodations throughout the term. A sophomore in Dabney Hovse recounted to us having to wait almost 3 weeks for the temp to try and find out what documentation was needed for a specific accommodation (one which would have been really nice to have for those first three weeks...), and that time frame included occasional follow-ups from the student.

The new permanent director, Sean Cutting, didn’t start until Spring Break 2023. Dean Nye insisted that 3 months is a pretty short turnaround time for hiring in academia — “This is just what happens when a professional leaves.”



Meet Sean!

First and foremost, Sean is a huge Star Wars and Harry Potter nerd. He is a husband and a father to his 8 month old son. He is passionate about helping people with disabilities integrate more smoothly into society.

“I think higher education is the great equalizer. It affords people with disabilities an opportunity and allows society as a whole to progress,” Sean told us on Friday. “It [higher education] is no longer optional.”

Sean has five years of experience in disability services in higher education. After getting his B.S. in Rehabilitation Services and M.S. in Counseling from Cal State LA, he interned at the Disabled Student Programs and Services office at Pasadena City College, before joining the Office of Accessibility Education at UMass Amherst in 2021.

With the estimated 12% of the combined undergrad and grad student body registered with CASS, revamping and streamlining accessibility policies has been no easy feat for our new Caltech staff member. When Sean arrived at Caltech, he recalled, there was very little organization of records and no clearly established precedent for what was considered a “necessary” accommodation.

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Schedule for Tuesday April 18th Student Faculty Conference

9:45 am

Doors open (Ramo Auditorium)

10:00 am

Opening remarks from President Rosenbaum

10:15 am

Effects of COVID on Caltech Academics

11:15 am

Rethinking Flexibility in the Core Curriculum

12:15 pm

Conclusion of morning session

12:30 - 1:30 pm

Lunch

Afternoon

(times vary, ~1 hour each between 1:30pm and 4:00pm)

Option committee talks

Rolling is Real Winner in Dabney vs. Fleming Discobolus

LILIA ARRIZABALAGA | SPORTS

March 13, 2023, 8PM

The scene is set: it’s a mild night with a soft breeze. The runners take their marks around the track. 3, 2, 1, and they’re off! Fleming Hovse takes a slight early lead with Dabney Hovse not far behind. The baton is passed, and Dabney takes the lead! Batons are passed again, and with them, Fleming retakes the lead. Dabney comes in strong in the last stretch, but it’s not enough to claim victory. Fleming reigns supreme and retains the Discobolus trophy for another undefined period of time.

After winning a battle of raw egg-eating against Ricketts Hovse the week prior, Fleming

had to defend the Discobolus title against the notoriously unathletic Dabney Hovse. As Dabney’s Athman, I knew this would be a tough battle — not just in terms of physical fitness, but also getting Darbs to show up at all.

In interhouse Discobolus, the challenging house chooses three sports: 1 conventional and 2 unconventional. They give this list to the defending champion, who then choose among the options. I solicited several sport suggestions from Dabney, and a multitude of very unconventional ones indeed were offered up — a squat song battle (a true test of endurance), salmonella (in-



spired by the raw egg eating contest), League of Legends, and a citrus catapult-building challenge.

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The South Hovse Hot Water Saga: Chili Today, Cold Tamale

LILIA ARRIZABALAGA | CAMPUS

As many of the residents of the South Hovses are aware, the hot water system is very inconsistent. Many times people have gone to shower only to be disappointed by lukewarm or cold water temperatures. Recently the problem has been especially concentrated in Dabney Hovse and Fleming Hovse, as well as one shower in Ricketts Hovse. At times it has gotten so bad that people are told to "Go to Hell [alley in Blacker]" to try to find hot water. Housing and plumbing have been trying to fix the issues, but they always seem to resurface, at least in part due to the age of the system.

The water system for the South Hovses is made up of two halves: one providing hot water to Dabney and Fleming, one providing hot water to Blacker. There's also an extra pump supplying water to Snake alley in Ricketts. There is also a new pipe connecting the two systems that can be

turned on if one of the systems goes down to temporarily borrow hot water from the other system. The pumps send out varying amounts of hot water depending on demand, and periods with great demand and tax the system too much.

There are several points of failure in the system owing in part to the age and complexity of the system. The South Hovses were remodeled in around 2004 so much of the plumbing infrastructure is also from this time and is reaching the end of its life. Many of the pipes are made of galvanized steel and are prone to rusting. This has caused problems in the past with water coming out of faucets being red or orange in color, especially after periods of low use such as after breaks. Pasadena city water is also very hard and leaves behind calcium carbonate buildup in certain spots in the system. This can cause the pipe to constrict which prevents the prop-

er circulation of water. This leads to dead legs and showers and other faucets not getting hot enough. The age of the system also causes problems with replacing parts. Many of the parts needed are only manufactured by one company who has been experiencing "supply chain issues", meaning that it can take months to order new replacement parts.

The water system is very large and contains around 200 valves. For example, if there is a problem with the hot water caused by a valve being bumped by accident, it can be difficult to track down — especially considering the valves are in hyperspace. The system has also had issues with the cold water supply leaking into the hot water. This can happen if both the cold and hot water taps are opened in a sink or a shower for a long period of time. This causes the hot water to cool down and can also be a difficult problem to identify.



Most recently, over spring break, Housing and Plumbing replaced a control valve for steam in the Dabney/Fleming system. These repairs took place on Wednesday March 29th, but hot water was still out for another day and the water was slightly rusty. However in the week since then, there have not been any new complaints so the system, for the time being it's working.

The hot water system should be capable of 112-118 °F water. If you notice it lower than this, either email Housing or submit

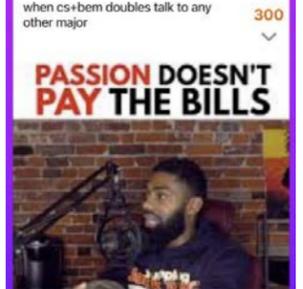
a ReAdy request if it's during business hours. Outside of business hours, please call the Central Plant at 626-395-4717. I do also urge students to be patient with Housing in performing these repairs as the Plumbing Shop is responsible for all the buildings on campus, not just the South Hovses, and they have often been working after-hours to try to fix these issues.

Editor's note: Remember kids, don't drink the yellow water!

This Week in the Houses...

Editor's note: Bechtel Residence did not respond to request for comment.

uhh page is chill tho fr


Surely Lloyd house is on the tip of everyone's tongue following the best interhouse of the century. "Lloydikart" featured some of the finest woodworking, murals surpassing those in Universal studios, and a mixset fit for the hippest clubs. There is no better time to be a Lloydie—well, except for the frosh who will be cleaning up for the following 5 weeks.



As the largest House on campus, Avery boasts a variety of interests and activities. Whether it's intense (water-gun-based) assassins competitions or baking each other's birthday cakes, Averites show love and appreciation for their community! We're currently looking forward to hosting some cool carnival games at Discotech and having our annual beach trip later this month.



As Blacker's Mad Max themed interhouse approaches, the hovse is gearing up to build its own post-apocalyptic party! "It's time to cook" says Steven Lei, one of the workfrosh for Blacker. Moles recently enjoyed an easter egg hunt and a party hosted in Marks. The hovse is also looking forward to the election of a new Chili Czar, camping trip, and beach trip.



AT THE FINAL FRONTIER OF THE CALTECH RESIDENTIAL EXPERIENCE, MARKS HOUSE CAN BE FOUND IN BETWEEN QUARANTINE AND FREEDOM. AN OUTDATED RESIDENCE ILLUMINATED BY FAILING FLUORESCENT LIGHTS, MARKS HOUSES THE UNLUCKY FEW WHO RECEIVED BAD PICK NUMBERS. THE KITCHEN MAY FLOOD, THE HEAT MAY GO OUT, THERE MAY BE NO HOT WATER, BUT RESIDENTS OF MARKS HOUSE HAVE EACH OTHER.



Editor's note: We could not think of a single person who lives in Braun to contact for a statement.



Spring has sprung, and the number of new Venerable noise complaints is none! We recently held a house-wide ping pong tournament, which, aside from a few casualties, was a fun spin to our normal rally of events. Though our dreams of joy will soon be crushed by oncoming sets, for now we can cope by consuming our ample supply of home-baked birthday cakes :)



On Friday Night Ricketts house had its pivotal "Major Erections" in which the house elects all major offices. Major offices are distinct from the unimportant "minor offices" like president and secretary, and include the much coveted position of "Crazy Fucker" and "Hurting Turtle". Probably the most contention election was for the position of Paranoid won by [CENSORED BY REQUEST OF THE UNITED STATES GOVERNMENT]. After the elections, there was much festivities late into the Night as Ricketts celebrated the dawn of new leadership for the year of 2023-2024.



It's an exciting term for Fleming! Not only are a lot of us closing out spring sports seasons, but we're all also getting pumped for BFP, our day at the Rosebowl and other fun traditions. While a lot of this is happening towards the end of term, we're looking forward to hosting a fun event for the DiscoTech frosh visiting next week.



Darbs are currently trying to shorten the length of their dinners, starting announcements one minute earlier every day. Though this saves time, it doesn't stop the uninged energy. Dabney is also enjoying its beginning of the term free time, screening stuff from star trek to Jesus Christ Vampire Slayer.



Rolling is Real Winner in Dabney vs. Fleming Discobolus

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But after a heated poll in our Telegram chat, it was decided that Dabney would challenge Fleming to Minecraft Hypixel Bedwars and citrus biting challenge (with shell), one of my personal favorite pastimes.

And, as Discobolus challenges are required to include one conventional sport, we chose a 4x100 Relay. This was for 2 reasons: the first being that Dabney Hovse has two members of the track team (one of the few sports any active Darb plays), and the second, because we hoped that this fact would dissuade Fleming from choosing it.

Alas, that game theory did not work out. To the disappointment of all the Darbs who had been practicing their citrus biting, Fleming chose the Relay. Their motive seems to have been that they did not entirely understand what citrus biting would entail, but thought it would be too similar to the raw egg eating contest. Additionally, there was a striking

absence of any Flems willing to play Minecraft.

Due to scheduling concerns, especially regarding Dabney Interhove the weekend before March 13th, the race was scheduled for finals week. This was evident to an astute observer in the turnout of each of the houses, but in very different ways. Fleming, who usually shows up in large numbers, was unable to muster quite as many people; and Dabney, who almost always forfeits because I can never recruit more than 3 people, had at least 8 people there! This is so many more than I can usually get! I attribute this to two factors: first, the propaganda which I spread around the house telling people to come play sport; and second, the usual Darb "I have sets" draft-dodging tactic was no longer viable.

In the end, although Dabney may have lost, I had a lot of fun and would like to thank Fleming and Fleming's Athman, Shelby Scott (ME '25, Fleming), for helping organize. As a bonus, I will present the results of an experiment the Darbs ran after the race was over. We were discussing the fastest form of movement on all fours, and the hypothe-

sis was that rolling, as seen in video games, would be faster than the alternatives. We set up the race in two parts. For around 20 meters we would run, then after we crossed a line our movement must not be bipedal until the finish line, around 70 meters later.

We had four competitors: one who was rolling and three on all fours with various methods of moving. The results were that rolling is faster; however our experiment might have been flawed, as our sample was not very large and the person rolling was already faster than the rest of the competitors. Perhaps an aspiring Caltech student will pick up where we left off and redo the experiment with better design parameters.

There will be more Discobolus this term along with the regular interhouse sports of basketball and soccer.

Lilia Arrizabalaga (Ay '25, Dabney) is the Athman for Dabney House where they attempt, usually unsuccessfully, to persuade Darbs to play sports. In their free time, they enjoy participating in casual and competitive citrus-biting, with a personal record of 7.



ASCIT Board of Directors Meeting

Minutes for April 9, 2023. Taken by Jonathan Booker.

Officers Present: Kavya Rajagopalan, Gabi Twombly, Sophie Elam, Shwetha Kunnam, Rachel Ding, Matticus Brown
Call to Order: 7:04
Officers' Reports:

- President (Kavya)**
- Bylaw Amendments
 - BoC Amendment: Increases the number of BoC Secretaries to 4.
 - Tech Amendment: Tech funding/payment requires BoD Approval.
 - Dues Amendment: Increase the dues from \$33 to \$40 a term.
 - Security Concerns:
 - Potential incident after Lloyd Interhouse.
 - Issues with Allied Security and their time response.
 - Problem delegated to VPNA.
- V.P. of Academic Affairs (Twombly)**
- SFC:
 - Engagement is down from last year.
 - April 18th.
 - There was an issue with ORE

- not submitting the Effects of Covid Survey to IRB.
 - Please encourage students and faculty to attend.
- V.P. of Non-Academic Affairs (Sophie)**
- Appointments:
 - Committee nominations have been made.
 - Appointments will be made next week.
 - Looking for nominations for IHC Athman.
- Director of Operations (Swetha)**
- Alumni Website to get donations from Alumni.
 - Charity of the week will be determined later this week.
- Treasurer (Rachel)**
- ORE has not gotten back on the work order.
- Social Director (Matticus)**
- ASCIT Formal
 - It is this Friday.
 - A lot of people have not paid.
 - Everything is set, we just have to pay for busses.
 - Social Directors / BoD will help with loading buses.
- Secretary (Jonathan)**
- Tech Editor appointments have been made.
- MEETING ADJOURNED: 8:02**

Staff Spotlight: Sean Cutting

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This seems to have been the case going back several years; for example, we spoke to a senior in Page House who, during a meeting with CASS in her sophomore year, was plainly asked if she "really needed that accommodation."

Sean chalks this up to a systematic assumption that the disabled community is much smaller than it really is. Only recently has the Student Affairs department "realized" that running the CASS office might be more than a one-person job. Indeed, perhaps hand-sorting an unorganized combination of paper and electronic documents for the ~300 members of the Caltech community with registered disabilities MIGHT be a little much for a single employee to keep up with. Gee, if they're not careful, that could even lead to a deep sentiment of mistrust, frustration, and confusion among students whose accommodations had requirements that seemed to have a lack of transparency and communication, were needlessly excessive, and took several months to verify.

Fortunately, Sean excitedly told us, he is determined to correct these pitfalls and streamline the workflow of the CASS office. He hopes that creating concrete and visible policies will help to increase faculty and student confidence in CASS recommendations and prevent academic accommodations from being exploitative of either party.

Sean is also working on setting up better data management systems and generalizing accessibility policies in hopes that a more straightforward path to obtaining diagnoses or provider recommendations can be implemented within the next year. The goal is to make initiating new accommodations, updating existing services, or scheduling psych evals all accessible from a single portal on access.caltech.

Often, students put off obtaining beneficial accommodations due to the high price of psychiatric or medical appointments, screening and tests, and the amount of time and effort it takes to get necessary appointments. However, Sean emphasizes that if you have a disability, then you qualify. Period. Documentation is indeed required for some accommodations to be granted, but if you don't have any, or if you're not sure, Sean still encourages you to set up a meeting with him to find out your options.

All it takes to establish an accommodation is reasonable justification – for example, if you're taking a prescription medication related to your issue, then the label on the bottle is enough documentation for at least a temporary accommodation without having to acquire diagnostics or doctor's letters. Sean is also working with Lee Coleman at the Student Wellness Services to push for campus providers to be able to screen students and recommend them for necessary accommodations, which would be a much more cost-effective and accessible plan than having to source outside providers.

How to get started

Sean told us that the best way to get started with an accommodation request is to fill out the relevant PDF forms on the CASS website (cass.caltech.edu) and then send them to him by email (cass@caltech.edu).

If you have any questions about CASS policies or want to schedule a meeting with Sean Cutting, the best way to reach him is by email (cass@caltech.edu). You can also directly sign up for a 30-minute meeting with him using his Calendly link (<https://calendly.com/scutting-1/30min>).

Thanks so much for chatting with us, Sean, and welcome to Caltech!

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Minimum pay is \$0.04 per word, \$5 per photo

Email submissions and inquiries to tech@caltech.edu or join our Discord server using the following link

discord.gg/Zaah8749s2



Do you have some woes in your personal life and just need to get some advice? Quail is here! Featured in the California Tech, Quail is here to answer your questions and help you with whatever troubles you during your time at Caltech. All questions are anonymous and will be answered in the California Tech's Question the Quail column.

Submit your questions to this Google Form!



<https://forms.gle/sa2YIE1QkQGkRWSv7>

Springtime Comes to Campus

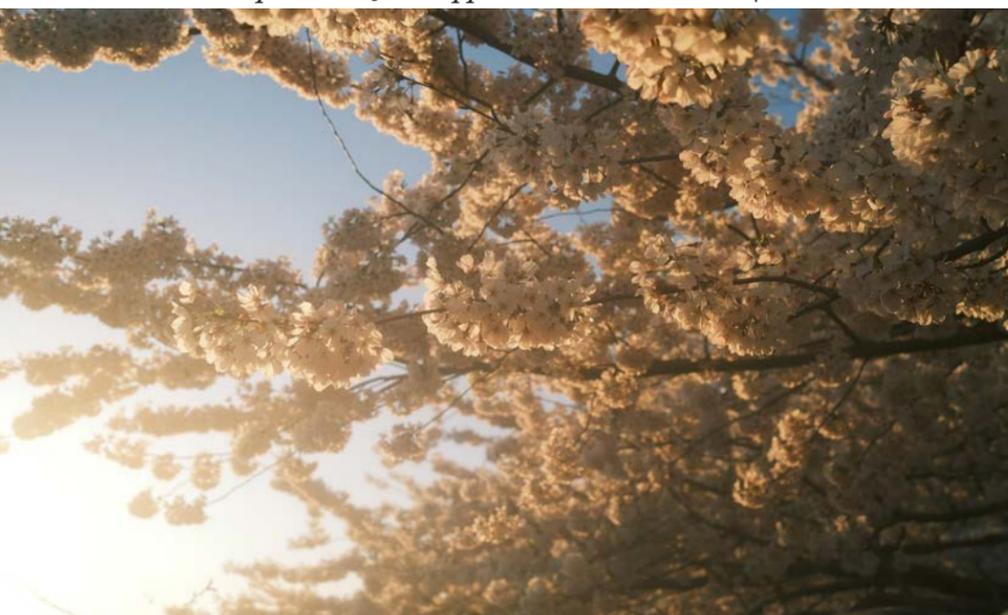
"PARROT ON OJ WALK" | ARDEN SHAO



GABI TWOMBLY | "CAMPUS FLOWERS" & "YELLOW DAISES FROM THE CALIFORNIA SUPERBLOOM LOCATED IN CHINO HILLS STATE PARK"



"The sunlight shining across the trees is the highlight of these photos. The annual DC Cherry Blossom Festival is very popular. Tourists around the country come and view the spectacle. I just happened to be in the area." | ABRAHAM BELAYNEH



“PREFROSH SEASON” | THANH THANH NGUYEN



Caltech Theater & MACH 33 presents

THE SUNRISE FROM THE MOON
by Hannah Manikowski
Directed by Brian Brophy
with members of the Caltech community

April 13 to 16, 2023 • Ramo Auditorium

Thurs., Fri. and Sat., April 13 - 15 @ 7:30 pm / Sun., April 16 @ 2:30 pm
Tickets: events.caltech.edu / or call 626-395-4652

THE SUNRISE FROM THE MOON (LEFT)

IS A FASCINATING GLIMPSE INTO HUMANITY'S FUTURE REVEALING THAT CERTAIN HUMAN CHARACTERISTICS DO NOT CHANGE WITH THE PASSAGE OF TIME.

ENTER ANNALIESE GARDNER, A YOUNG WOMAN WHO HAS SURVIVED A CATASTROPHIC COLLAPSE OF A MOON COLONY AND IS THE SOLE SURVIVOR. SHE HAS LIVED TEN YEARS YEARS IN ISOLATION SURVIVING ON BOOKS, MUSIC AND FOOD RATIONS. SHE IS BROUGHT BACK TO EARTH WITH THE HOPES OF REINTEGRATING HER INTO SOCIETY...BUT THEN THINGS GET COMPLICATED AS IT OFTEN DOES WHEN DEALING WITH THE HUMAN PSYCHE.

THE RACE FOR THE COLONIZATION OF SPACE CONTINUES BUT WHAT ABOUT THE RACE FOR HER HEART? THIS IS A STORY OF BOTH THE CHALLENGES OF SPACE EXPLORATION AND THE CHALLENGES OF INNER SPACE. A DESPERATE SEARCH FOR LOVE THAT DWELLS WITHIN EACH OF US. A SEARCH FOR THAT BEAUTIFUL SUNRISE FROM OUR PERSONAL MOON.

“SPACE,
LOVE,
LOSS,
JELLYFISH,
AND LOTS OF
VANILLA
COKE”

STARRING

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Gerard for Unilateral Excomm

MATTEO KIMURA | HUMOR

Well folks, let me tell you something just awful and terrible that the stupid FRICKS at Ricketts Hovse have been hiding. Gerard Decker ('26, Ricketts), a fantastic guy, a really great guy, was robbed, yes robbed, of becoming the Unilateral Excomm of Ricketts Hovse. The current Excomm decided it was too radical to allow Gerard to become Excomm and instead they pretended that Meg Robertson (GPS '24, Ricketts) and the rest of Ricketts Excomm won the votes for their positions when they DIDN'T!

Can you believe it? It's unbelievable folks.

Now let me tell you, Gerard, he's a winner, a real winner. He would have been the best Excomm Ricketts Hovse has ever seen, believe me. But you know what happened? The establishment, they couldn't handle Gerard's success, they were scared of him. They were scared of his big ideas, his tremendous plans, and his incredible leadership skills.

But let me tell you something, Gerard is a fighter. He won't back down. He won't let the system stop him from Making Ricketts House Great For The First Time. No sir, he won't.

So to Meg Robertson, I say this, you better watch out, because Gerard Decker is coming for you. He's coming for you, and he's going to win. He's going to win big, and there's nothing you can do about it.

That's right folks, we're not just going to sit back and let the government get away with robbing Gerard Decker of his rightful position as the unilateral Excomm of Ricketts Hovse. No way, we're taking action.

On May 69th, we're planning a protest in the Ricketts Hovse courtyard. It's going to be huge, the biggest protest Ricketts Hovse has ever seen.

We're going to stand up for what's right, and demand that Gerard gets the position he deserves.

Now let me tell you, this is not just about Gerard. This is about all of us. This is about taking back Ricketts Hovse from the crooked government, and making it a place where everyone can succeed.

So I urge all of you to join us on May 69th, and make your voices heard. Let's show the bourgeoisie that we're not going to back down, we're not going to be intimidated, and we're not going to let them get away with this. Together, we can Make Ricketts House Great For The First Time. Let's do it folks!

Editor's note: The following is an excerpt from a statement Gerard submitted to the Tech. The full statement can be found on our website at

tech.caltech.edu.

"I am throwing my hat in the ring for all of the upper Excomm positions, simultaneously. I'm the obvious choice for Ricketts President. As Ricketts Hovse President, I will remove the RA and RLC positions from the house, have no more psets, no more exams, no more classes, open Kitchen will be open 24/7, and most importantly, no more Lilly Coffin [sic]. Without me at the helm, Ricketts Hovse is like a ship without a captain, ultimately doomed. So I urge you to vote for me as President of Ricketts, or face the consequences of a house in ruins."

Editor's note: Ricketts Excomm elections were held last February. The count has long since been stopped. Meg Robertson addressed this in a statement today, which can be found on tech.caltech.edu.

The Super Mario Bros. Movie: A Light in the Darkness

JUSTIN TOYOTA | HUMOR

I'll make no bones about it. The Super Mario Bros. Movie was easily the most anticipated movie of the year, if not the last decade. Even the reveal of the voice cast over a year ago produced a nearly unprecedented amount of buzz on social media. It's not hard to see why: this film has one of the most stacked voice casts of any animated film I've ever seen, with big names who perfectly fit the iconic Mario characters they play. The lead, Mario Mario, is voiced by mega-star Chris Pratt, who like the plumber himself is a sex icon who has worked closely with dinosaurs. His sidekick Luigi is voiced by Charlie Day, famous for portraying another paint-huffer in Charlie Kelly from *It's Always Sunny in Philadelphia*. Or how about *The Queen's Gambit* lead Anya Taylor-Joy as Princess Peach? Perfection. It's easy to see why fans were so intrigued when these roles were announced.

And then there's the studio producing the film. In collaboration with Nintendo, *The Super Mario Bros. Movie* is being produced by Illumination, in my opinion the finest animation studio currently active. Like Kendrick Lamar, their record is essentially spotless. With their latest endeavors including the tear-jerking *Minions: The Rise of Gru*, the incredible *Sing 2*, and the totally necessary *The Secret Life of Pets 2*, it's no surprise that this brought a great deal of eyes to the project.

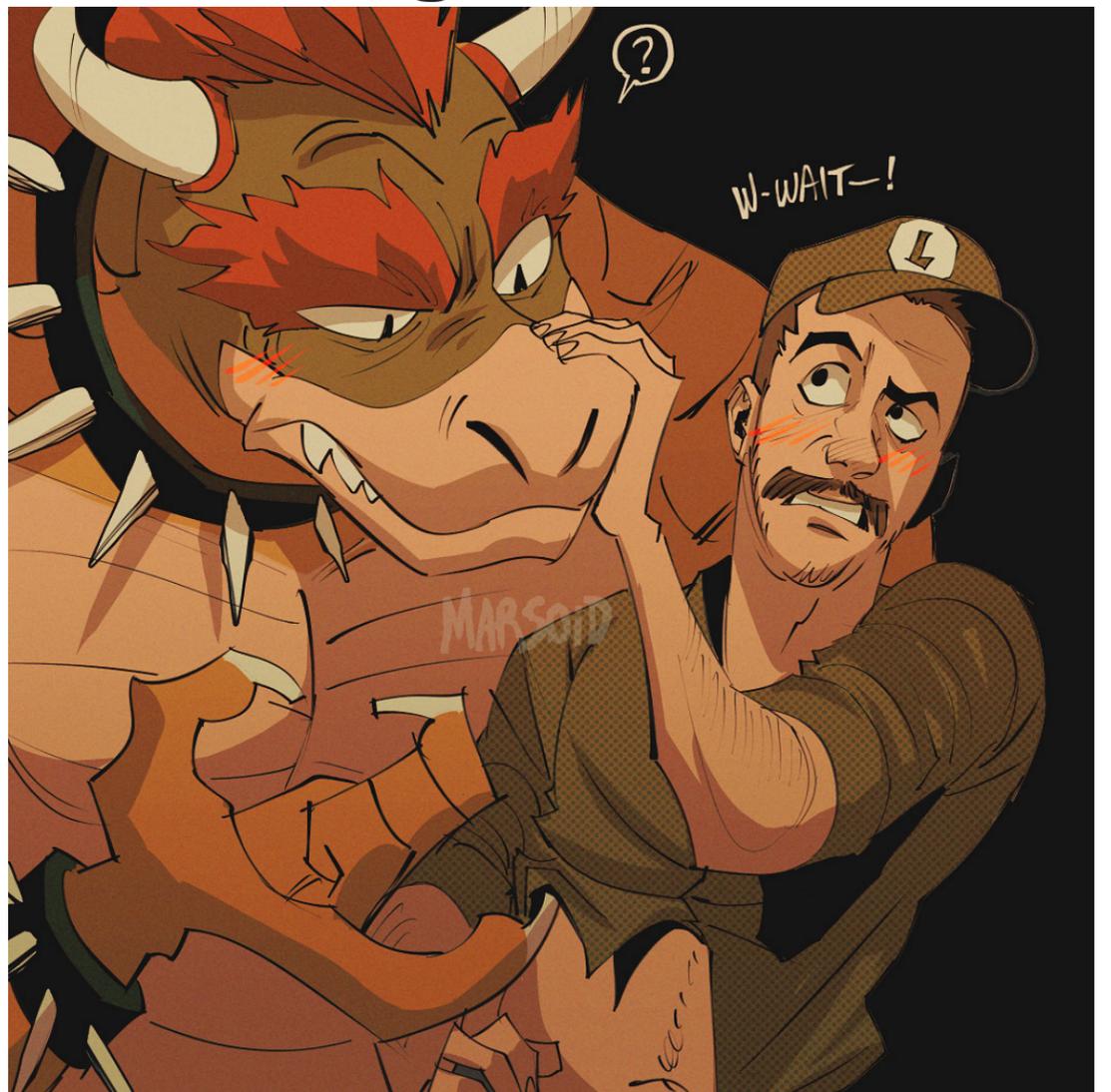
But no amount of hype or résumé answers the question you're likely asking: how is the movie? In a word, genius. In a few more words, the film more than lives up to the lofty expectations it garnered. Continuing the Kendrick comparison, I would go so far as to say it is Illumination's *To Pimp a Butterfly*. Not in terms of its

racial politics—in fact, I would argue that the film's portrayal of Italians is easily its weakest aspect—but in its spectacular vision and originality. It is an artistic triumph, and will hopefully prove the final nail in the coffin of (admittedly justified) preconceptions against video game films.

The story is the main strength of the film. The Mario video games are not well known for their plots, but the franchise is old, large and diverse enough that it contains numerous narrative gems in its catalog. It is clear that *The Super Mario Bros. Movie* has turned to a handful of these for inspiration, including the cult classic *Hotel Mario* and the criminally underrated *Super Mario Bros. film* from 1993. The influence of the latter is particularly evident in the newer film's cyberpunk dystopian setting.

In this film, the Mario brothers are humble plumbers in a futuristic dictatorship that is ruled with an iron fist by the evil Bowser. After a chance encounter with the radical leftist agitator Donkey Kong ("the Destroyer"), the two find themselves drawn into the underground rebellion, exploring their society and identities in a surrealist phantasmagoria. Not many films can boast both gladiatorial combat and a psilocybin-inspired car race. Whereas the 1993 film often bordered on camp, the new one is a sardonic, masterful genre deconstruction steeped in postmodernism. Its almost Freudian takes on Luigi's journey from boy to man and Mario's apotheosis from man to sexual archetype were stunning, and its twists (which I won't spoil) blew me away -- no pun intended. I am legitimately sad that I missed even a minute of this film while going to the bathroom.

The *Super Mario Bros. Movie* should also be celebrated for



ART CREDIT: @MARSOID ON TUMBLR

its representation of LGBTQ characters, which is refreshingly novel for an Illumination film. Contrary to what you might expect, they were not satisfied with just including Birdo for a short gag. The mainstream media will likely focus on the lesbian relationship that blossoms between the historically helpless "Princesses" Peach and Daisy (befitting this film's progressive sentiments, these characters have been changed from actual monarchs to mafia bosses). But attention should also be given to the strong erotic undertones that were painted between Luigi and Bowser. While not an explicit relationship like Peasy, Bow-igi felt raw and visceral from the moment Bowser first caressed Lu-

igi's cheek. The depth of visual references to common yaoi tropes was a welcome surprise.

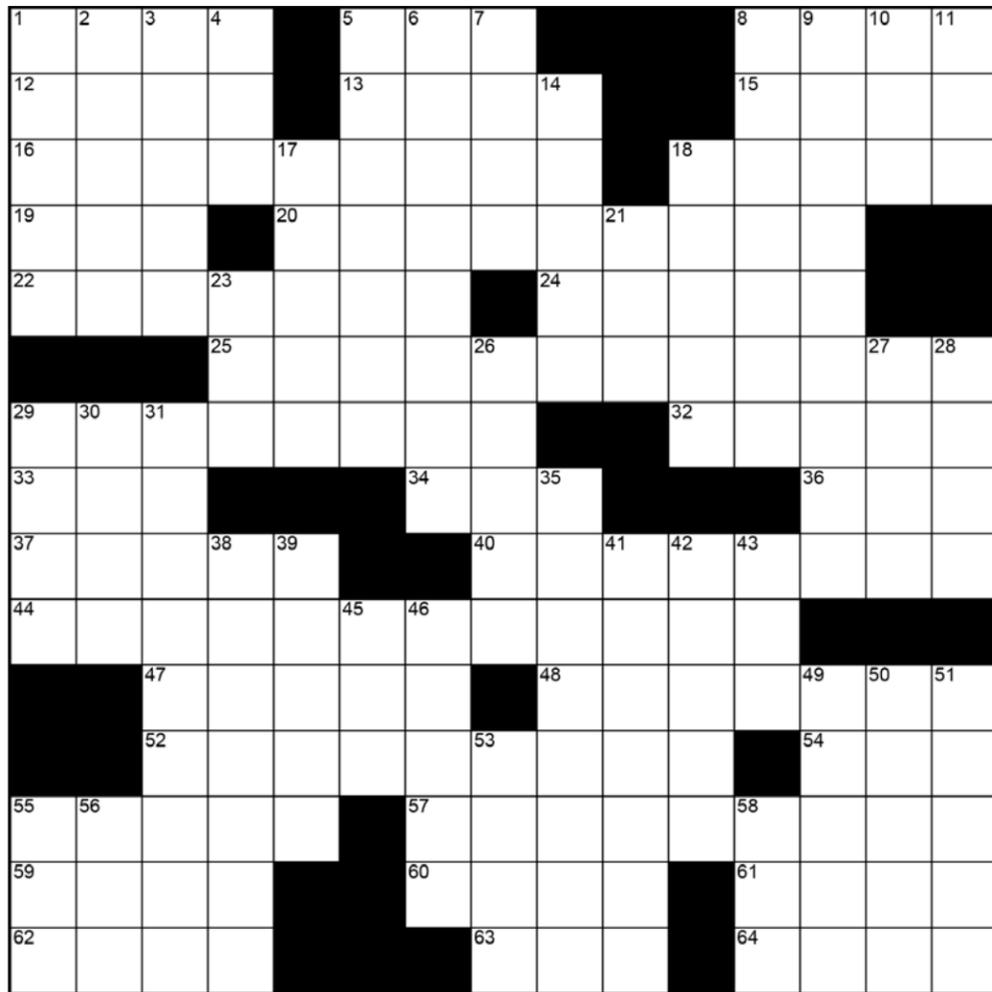
I want to end on one final note: this movie succeeds as a love letter to the fans. A good film is a good film, of course, and this film can be enjoyed by anyone. But when it comes to an adaptation, especially an adaptation of something as widespread and beloved as Mario, it's gratifying to see a true passion for the source material shine through. As I mentioned above, the story itself is heavily inspired by some of the great Mario stories that have come before; I'm sure any fan of these stories will be happy to see them revived on the big screen. But there are little touches too: cameos of charac-

ters both beloved and obscure, subtle visual flairs calling back to past games, and references to well-known memes and in-jokes from the fan community. The one that will likely receive the most buzz was the short appearance of Bowsette, a popular fan character. (Another win for the trans community!)

In a time when gamers are more oppressed than ever, this film stands as a light in the darkness, an inspiring creation that is hopefully the vanguard of many more to come. I would encourage anyone who loves good stories to watch it. You won't be disappointed.

Editor's note: Justin Toyota wrote this piece a week before the movie was released.

TCT CROSSWORD - "DEMONYMS"



ACROSS

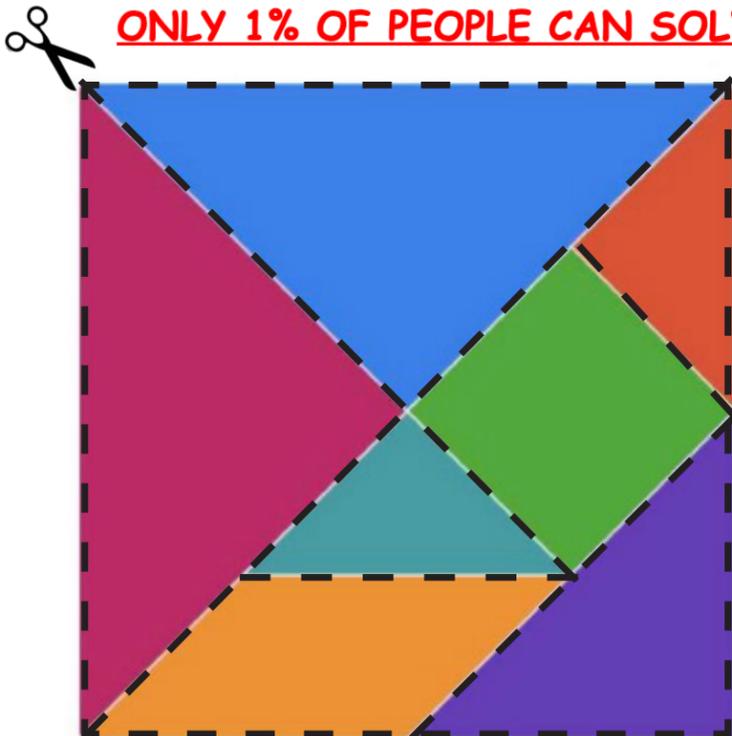
- 1 A one or zero
- 5 Taxi
- 8 Pleads
- 12 Radius's pair
- 13 Spanish for to tie
- 15 The terrible Tsar
- 16 A Blacker member's favorite chip topping
- 18 Slightly larger than a C-battery
- 19 Makes eggs
- 20 To go on and on
- 22 Rainforest branch dwelling snake
- 24 Dishonest people
- 25 A Fleming members' favorite bird, might be part of a militia
- 29 Equine insect
- 32 Perfect condition, "Good _____" (2 words)
- 33 General water hardness measure, abbr.
- 34 Short cry or yelp
- 36 Cairo intl. airport
- 37 Someone who makes an effort
- 40 People who naysay or contradict
- 44 A Venerable members' favorite type of diagrams
- 47 Dr. Dean _____
- 48 "Ignorance _____" (2 words)

- 52 What you might do to come to college (2 words)
- 54 Conflict of interest, abbr.
- 55 "Frankly, my dear, I don't give _____" (2 words)
- 57 A Dabney members' favorite bird, its woody
- 59 Small or tiny
- 60 Mother of Kim Kardashian
- 61 Down payment for a poker game
- 62 Electrical / band
- 63 Sound of disgust, like Gah!
- 64 Shakespearian expression of surprise

- 17 Shortened form of Abigail
- 18 "Strawberry Wine" singer Carter
- 21 National Institute of Aerospace, abbr.
- 23 Hospital departments that deal with emergencies
- 26 Looking with interest
- 27 Back part
- 28 Like DUIs
- 29 High def. television
- 30 Like Shrek
- 31 Western area of Germany along a river
- 35 Type of science table
- 38 Particular to a region
- 39 "Indiana wants me" singer Taylor
- 41 PPE to protect against fumes
- 42 Fossilized tree resin
- 43 Color space with tint
- 45 Illuvium crypto.
- 46 Know it alls, smart _____
- 49 Cake or Cookie topper
- 50 Kinda
- 51 Supported or aligned with
- 53 Queen of the Greek Gods
- 55 Ask me anything
- 56 Ex. Websters, abbr.
- 58 Sig. other, informally

TANGRAMS

ONLY 1% OF PEOPLE CAN SOLVE THIS PUZZLE



Match the shape!

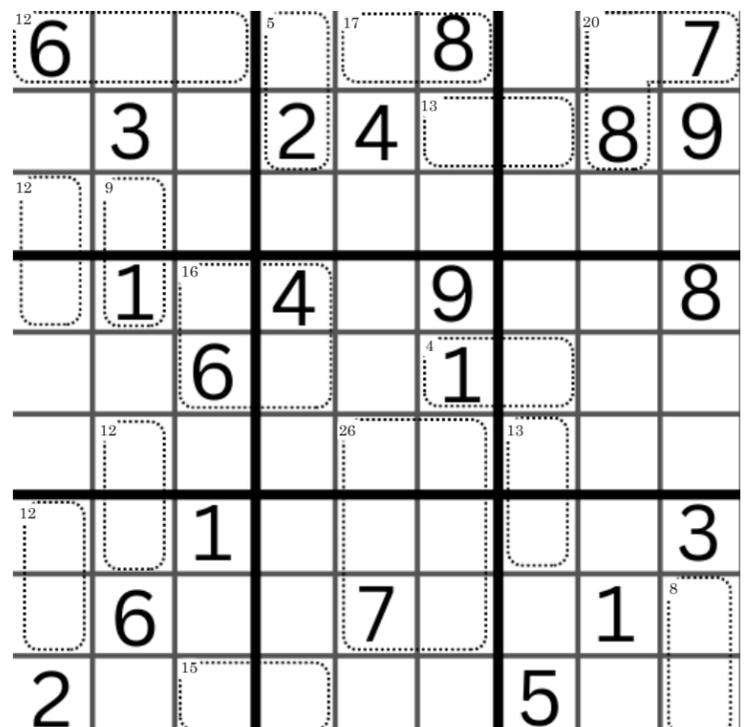


Last week's Crossword Solution



Killer Sudoku Rules

1. Only 1 number can be placed in each cell (You can't attempt to squeeze a 1 and 2 into a single cell to complete the puzzle.)
2. Each row, column, and nonet can only contain unique numbers. (You couldn't have two 4's appearing in the same row, column, or nonet. This is the standard rule for Sudoku.)
3. The sum of the numbers inside of a cage must equal the clue number (A Cage with two Cells and a clue of 3 must contain the numbers 2 and 1.)



Caltech Y 2023 Spring Break Trip to Hawai'i

SASCHA GOLDSMITH | STUDENT LIFE

After a 3 year hiatus due to COVID, the Caltech Y hosted their 7-day Alternative Spring Break (ASB) trip to the Hawaiian islands. Attendees included graduate and undergraduate students alike, all with varying backgrounds, countries of origin, and courses of study - many of whom hadn't met before the trip.

Upon arriving in Honolulu on O'ahu, we spent our first day exploring nature, marine life, and food around Waikiki and the North Shore in Manoa. Next up, we took a plane to Hilo on the Big Island where we met our North Shore Ecotour hosts, Keola and Tasha Ryan, who are both faculty at University of Hawai'i. We spent the next few days in a communal cabin surrounded by

lava flow fields and the sacred volcanic peaks of Mauna Kea and Mauna Loa. The weather ranged from hot and humid to freezing and windy, plus random bouts of rain to keep things interesting.

From day one, the importance of 'Aina (land stewardship), Hawaiian language, and cultural traditions and origins were emphasized. Together, our group prepared traditional recipes like Lau Laus, during which we were taught about the cultural and spiritual importance of each ingredient. We also consistently participated in discussions with guest speakers from backgrounds including academia, conservation and resource management, and astronomy as telescope technicians. Each speaker

was able to give our group personal insight about relevant issues pertaining to cultural practice and preservation, how that intersects with the pursuit of science and astronomy, and endangered species management.

We were also given an amazing opportunity to learn about Polynesian navigation systems, the Thirty Meter Telescope controversies, and traditional Hula as we hiked through the stunning volcanic geology on Mauna Kea and at Volcanoes National Park.

Sophie Polidoro (ME '25, Avery), one of the 12 group members, recounted that her most memorable experience was working with HuiMAU, a non-profit aiming to rehabilitate their native ecosystem.

"Learning about how this group is trying to clear out mono-crops that were introduced to their native land and restore the plants that their ancestors used to grow there was really moving! It was nice to [contribute to and] learn from the techniques they used to restore their land, like clearing out invasive grasses and planting native edible plants to feed the community."

The Caltech Y has many more trips and events like the 2023 ASB excursion planned and in the works! Be sure to check your emails for Caltech Y newsletters and support the Y by renting any outdoor gear you might need at a low cost.

Left: Learning about native plants and their nutritional importance to native species and peoples

Diagonal: Caltech Y ASB group 9000ft up on the volcano Mauna Kea with Mauna Loa in the distance, surrounded by smaller volcanoes under the clouds

Below: Caltech Y ASB group behind 2 of 400 newly planted native trees to help support the endemic and endangered Palila bird population

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IMAGING THE BEGINNING OF TIME FROM THE SOUTH POLE

continued from page 1

These observations are very important in fundamental physics because they open a new window to probe the energy scale at the beginning of time — when the universe was a mere fraction of a second old. Our team is leading the scientific world on characterizing the inflationary gravitational waves. The BICEP Array telescope represents the latest phase in our experiments, and will search for inflationary gravitational waves with unprecedented sensitivity levels over a wide range of radio frequencies.

We successfully designed and deployed the first low-frequency BICEP Array receiver to the coldest place on

Earth: the Amundsen-Scott South Pole Station, a place where the atmosphere is extremely cold and dry, and consequently transparent at millimeter wavelength. I went to the South Pole twice and stayed there for about 6 months total. It was an unforgettable experience for me.

I also became the first Egyptian scientist to raise the Egyptian flag twice at the South Pole — in $-60\text{ }^{\circ}\text{C}$ — which made me something of a celebrity back home. I delivered science outreach events to various STEM schools around the world about our daily life and our science experiment while I was at the South Pole. These videos have reached millions of views on social media. It was really amazing.

Such innovative events are needed to better engage students of all ages in science. These educational needs as well as my personal desire have motivated me to make astronomy (and science in general) accessible to a broader

and more diverse demographic. I was really happy that my story inspired people, especially kids, to love and engage more in science. One of these schools awarded me an appreciation prize during my visit to Egypt.

We still have so much to learn from our data taken from the sky at the South Pole. We are currently analyzing the hidden details in the data about the baby universe, and we expect interesting publications soon.

