

# YouTuber Mark Rober will be 2023 Commencement speaker

*Rober, who creates science and engineering focused content, will speak at the OneMIT Ceremony Jun 1*

By **Wenbo Wu and Srinidhi Narayanan**  
NEWS EDITORS

Mark Rober, a former NASA engineer and science communicator best known for his YouTube channel, will speak at the 2023 OneMIT Commencement Ceremony June 1.

Rober has amassed a YouTube following of over 23 million subscribers with over 3 billion views as of press time. Some of his most popular videos include swimming in Jell-O, filling hot tubs with “liquid” sand, and a series of engineering videos on catching package thieves using a “glitter bomb” contraption.

“For millions of young learners (and a few older ones, too), Mark Rober is making science and engineering inspiring, engaging, accessible, and most importantly, fun,” President L. Rafael Reif told MIT News. “His videos and build-box kits brim with creativity and energy — hand-on learning at its finest.”

Rober said to MIT News that he is “such a believer in hands-on, practical engineering solutions to real-world problems,” and that he “can’t think of a school that has a better reputation for that than MIT.” Rober is “excited to come out and meet the Class of 2023 and celebrate all the amazing, positive change they’re going to bring to the world.”

Prior to starting his YouTube

career, Rober studied mechanical engineering at Brigham Young University (BS) and the University of Southern California (MS), spent nine years as a mechanical engineer at NASA’s Jet Propulsion Laboratory, and five years on project design working at Apple.

Outside of making videos, Rober raises awareness for autism, a condition his son has. Rober also collaborates with Jimmy Donaldson, better known as MrBeast on YouTube, to fight climate change with initiatives like Team Trees, which has already planted over 20 million trees, and Team Seas, which has already removed over 30 million pounds of plastics from oceans, rivers, and beaches.

Senior Class President Anna Sun ’23, Undergraduate Association President David Spicer ’23, and Graduate Student Council President AJ Miller G underscored Rober’s inclusive and accessible approach to technology.

Sun said that “accurately described as the ‘Willy Wonka of engineering,’ Rober has an acumen for innovation and serves as an inspiration for redefining how we students can use our knowledge to impact those around us. I can’t wait to learn more from his experiences.”

Spicer stated that “bringing individuals from all walks of life into an educational environment is a

feature of MIT, and Mark Rober captures this MIT quality through outreach videos that spark imagination and innovation in the minds of learners across the globe.”

Miller shared that he loves “how [Rober] makes building and communicating science fun and accessible to everyone and inspires so many young people to pursue education and careers in technology.”

Spicer also pointed out that “Science and engineering are not static. Education is not stagnant. Rober is a fresh example of the importance of bringing the new generation of learners into STEM education through pioneering methods,” while Miller added that “Mark Rober is a great exemplar of the quirky, creative energy for engineering we so highly and uniquely value at MIT, and I can’t wait to hear him speak at Commencement.”

Recent Commencement speakers include director-general of the World Trade Organization Ngozi Okonjo-Iweala MCP ’78 PhD ’81 (2022), civil rights lawyer and activist Bryan Stevenson (2021) and retired Navy four-star admiral William McRaven (2020).

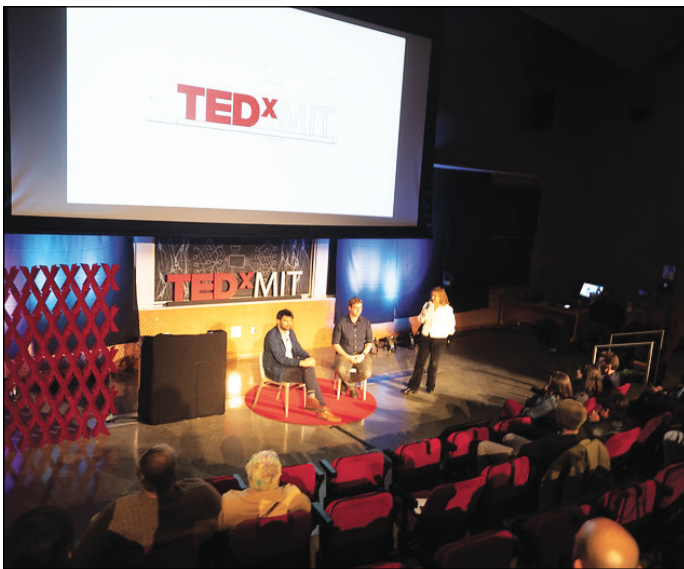
MIT’s Commencement celebrations will take place over three days from May 31–June 2, 2023, unlike past years, which have featured two-day

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FRANKIE SCHULTE—THE TECH

**Students gathered in Lobby 10 for the UA Crafts Market** to purchase arts and crafts made by various MIT students, Sunday.



COURTESY OF TEDxMIT

**Speakers are interviewed on stage** at the TEDxMIT event, Sunday.

# Brent Ryan and Anne White will assume role of associate provost

*The associate provosts will work ‘within the Office of the Provost to support the day-to-day operations’ of the Institute*

By **Alex Tang and Eunice Zhang**  
ASSOCIATE NEWS EDITORS

Brent D. Ryan PhD ’02 and Anne White assumed the role of MIT Associate Provost Nov. 18, Provost Cynthia Barnhart PhD ’88 and Associate Vice President for Research Maria T. Zuber announced in an email to the MIT community. White was also appointed Associate Vice President for Research Administration.

Communications Director for the Office of the Provost Catherine Williams wrote that the associate provosts “work within the Office of the Provost to support the day-to-day operations of the Institute” in an email to *The Tech*.

Ryan, an associate professor of urban design and public policy, is currently head of the City Design and Development group in the Department of Urban Studies and Planning. Prior to joining MIT’s faculty in 2009, Ryan held professorships at Harvard University and the

University of Illinois at Chicago, and worked as a city planner and urban designer.

As associate provost, Ryan’s primary responsibilities will be “long” and “short-term campus planning.” He will oversee “supporting departments and units to serve student research-related activities at the local level.”

White, a Distinguished Professor of Engineering, is currently head of the Department of Nuclear Science and Engineering. White has “served on several Institute-wide committees” and co-chairs MIT Climate Nucleus, a faculty committee responsible for managing and implementing Fast Forward: MIT’s Climate Action Plan for the Decade according to the email.

As associate provost and Associate Vice President for Research Administration, White will oversee offices supporting “the administrative and financial functions of the research enterprise at MIT,” includ-

ing the “Research Administration Services, Research Administration Systems and Support..., Research Development, and the Office of Strategic Alliances and Technology Transfer.”

Williams stated that the selection process for the associate provosts involved consultation “with selected academic council members; department, lab, and center heads; staff members leading and supporting MIT’s research administration and space space management and campus planning functions.” Williams added that “interested faculty and students” were able to voice input.

With Sally Kornbluth to assume MIT’s presidency Jan. 1 2023, Williams said that the associate provosts will work in conjunction with Barnhart “to support Dr. Kornbluth’s initiatives and priorities related to research administration and space management and campus planning.”



MICHELLE XIANG—THE TECH

**The MIT Logarithms perform a cappella at their annual fall concert, Logs Got Talent, in Kresge Auditorium, Saturday.**

## IN SHORT

Winterfest 2022 is Dec. 8.

Last day of classes for fall term is Dec. 14.

Final exam period for fall term is

Dec. 16–22.

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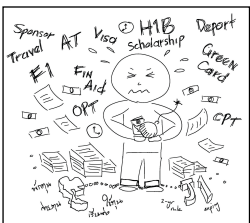
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## CAPTIVATING

When actors do justice to their roles. **ARTS, p. 3**

## CRISIS

MIT should address increased cost of living. **OPINION, p. 4**



## SHACKLES

Visas are limiting my life. **CAMPUS LIFE, p. 5**

## REALITY CHECK

Topics of life and death. **CAMPUS LIFE, p. 6**

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WEATHER

Approaching the end of the fall season

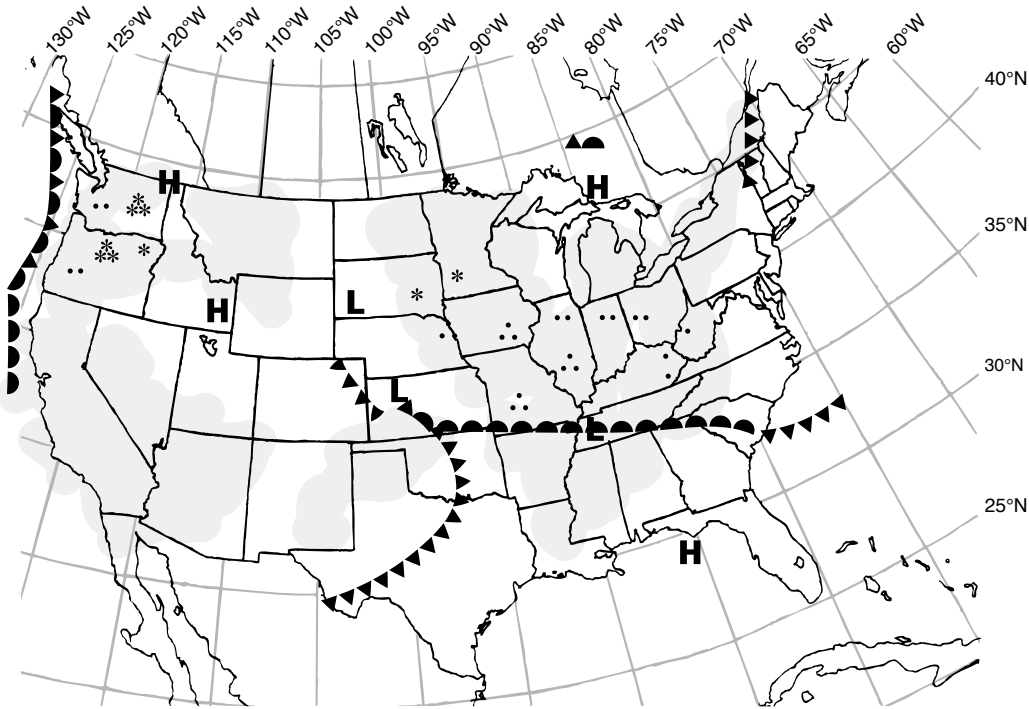
By Paige Yeung

Winter is approaching! Thursday and Friday will be sunny and clear, but a cold front is moving in this week and bringing colder temperatures with it. These colder temperatures are expected to arrive over the weekend, and there is a chance of rain on Saturday. Winter storms aren't here quite

yet, but make sure to bundle up and have winter supplies on hand as you brace for the end of the fall semester. Meanwhile, in the rest of the U.S., northern California and the Pacific Northwest are expecting rain and snow from a cold front. The Midwest may experience thunderstorms as the winter season draws closer

Extended Forecast

**Today:** Sunny. High around 50°F (10°C). Northwest winds around 14 mph, with gusts up to 25 mph.  
**Tonight:** Mostly clear. Low around 33°F (1°C). Northwest winds around 11-14 mph.  
**Tomorrow:** Sunny. High around 44°F (7°C). North wind around 11-14 mph, with gusts up to 25 mph.  
**Saturday:** Mostly cloudy, with 20% chance of rain. High around 40°F (4°C). North wind 14-17 mph, with gusts up to 28 mph.  
**Sunday:** Cloudy. High around 38°F (3°C). Northeast winds around 11-13 mph.



Situation for Noon Eastern Time, Thursday, December 8, 2022

Weather Systems		Weather Fronts		Precipitation Symbols		Other Symbols	
H	High Pressure	- - -	Trough	⬆	Snow	☁	Fog
L	Low Pressure	— — —	Warm Front	⬇	Rain	⚡	Thunderstorm
§	Hurricane	▲ ▲ ▲	Cold Front	*	Light	∞	Haze
		▲ ▲ ▲	Stationary Front	**	Moderate		
		— — —		***	Heavy		

Compiled by MIT Meteorology Staff and The Tech

Undergraduates will receive their diplomas on Killian Court on June 2

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ceremonies, Provost Cynthia Barnhart PhD '88 and Chancellor Melissa Nobles announced in email to the MIT community Dec. 7. In addition to the OneMIT ceremony for all graduates, undergraduates will receive diplomas on Killian Court June 2. Programs,

schools, and the college will hold recognition ceremonies for advanced degree recipients between May 31 and June 2. While this particular format is new, several aspects of past ceremonies remain: the OneMIT ceremony debuted at 2022 Commencement, following two years of virtual ceremonies.



OLIVIA LEE—THE TECH

Tracy Chang - Chef and Owner of Pagu - shows the technique behind noodle pulling at AAI speaker event, November 29th.



KATE LU—THE TECH

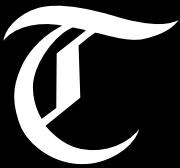
Simmons Hall residents dance at the Dance and Mocktail Party in honor of Simmons' 20th birthday, Friday.



RILA SHISHIDO—THE TECH

A capella group Syncopasian performs at their fall "Syncommercial"-themed concert in 10-250, Sunday.

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GUEST COLUMN

# A one-time payment can't address an ongoing crisis

*Additional measures must be introduced to address the increasing cost of living*

By Terra Choffin and Jordan Silva

On Oct. 19, MIT's administration sent an email announcing a "special one-time payment" of \$1,500, pre-tax, for some eligible employees, which MIT will provide in response to concerns about inflation and the financial challenges it has posed. The payment is set to be included in December paychecks, but MIT has made no mention of any recurring bonuses in the future. As employees, we are grateful for the payment; however, a stand-alone bonus is not a long-term solution to the rising cost of living. MIT employees need real relief in the form of a cost-of-living adjustment to our salaries.

Changes in the actual cost of living in Boston

Terra is a long-time employee of the Institute, and Jordan is a newer employee. Comparing situations at the beginning of our tenures at MIT is instructive. Using the CPI calculator at the Bureau of Labor Statistics web site [1], we looked at salary and cost of living increases. Comparing Terra's starting salary at MIT in 1990 and Jordan's in 2020, CPI-adjusted, Jordan's starting salary was similar.

However, over the last 32 years, many essential living expenses in this area have increased at a rate far exceeding overall inflation. In 1990, Terra was able to afford to share a four-bedroom Philly-style apartment in the Central Hill area of Somerville with four friends, with rent at \$1,250 per month (\$250 per person). According to the CPI calculator, that amount adjusts to \$2,784 (\$557 per person) in late-2022 dollars. The rent estimate on Zillow for that same apartment today is \$4,964 (\$993 per person, now listed as five bedrooms), an additional increase of 78% beyond inflation. That's in line with the price-per-bedroom cost for apartments in older (ostensibly more affordable) housing stock in the area today.

It's possible to find less expensive housing outside of the Boston metro area, but then it becomes necessary to take the commuter rail (\$90-\$426 for a monthly pass, which is only 60% subsidized by MIT, as

opposed to the monthly T pass, which is fully subsidized,) or drive. The inflation-adjusted price of the used car Terra bought in 1987 is \$5,165 in late-2022 dollars. A search of later-model used cars today shows that the prices of similar vehicles start at around \$10,000. For employees, the cost of parking on campus is capped at \$1,995, or about \$166 per month, and the average cost of gas has also risen faster than the rate of inflation, if only by a relatively modest 24%. Factor in the time spent commuting as well, and the savings from living outside the city are greatly reduced.

According to an October 2022 article in Money [2], overall inflation from October 2021 to October 2022 was 8.2%. Meanwhile, grocery prices are up 13% during that time period, and natural gas is up 33.1%. At the same time, we have expenses that are considered essential that simply did not exist 30 years ago, such as cell phones and home broadband service.

The impact on employees

The rising cost of living has required employees to make difficult decisions. Some have had to find second jobs to make sure their bills are paid. Some have felt like they need to leave MIT for a higher-paying role despite wanting to stay at the Institute. Until September 2022, Jordan lived in an unsanitary apartment covered in cat litter with three other roommates, two of whom she felt unsafe or uncomfortable around, because it was the only way she could afford paying rent while still saving money. The toll these living conditions had on her mental health was beyond what she had ever experienced. Despite this, she still second-guessed whether leaving to live in a safer, more sanitary environment would be feasible because her rent would double and eat into two years of savings.

MIT employees should not have to sacrifice our wellbeing or leave the jobs we love in order to get by. MIT is a resourceful institution capable of making a massive impact on the quality of our lives. Providing employees relief would also be mutually beneficial for MIT and those who work here. Employees would suffer less burnout and perform more efficiently if we weren't

constantly worried about finances, working extra hours at other jobs, or wishing we had the wiggle room to afford things that contribute to our wellbeing. We could focus more on the needs of our students if we were not so overwhelmed by our own needs. Employee retention would be greater if employees didn't feel like they had no other choice but to leave due to financial burdens. Without relief, other than the one-time payment, stress and tension will continue to grow.

Conclusion

MIT's annual merit raises have been holding steady in the vicinity of three percent for at least three decades. On average, this has been barely enough to keep pace with inflation, and certainly not enough to keep pace with the actual cost of living in the Boston metro. It is past time for MIT to start offering cost of living increases rather than just merit raises and address job performance as a separate issue. We know that MIT has financial resources available for this type of expenditure because MIT just gave a significant raise, on the order of up to 20%, to our Postdoctoral Associates starting Jan. 1, 2023, which the Institute will subsidize for the first year.

Working at MIT wasn't always so stressful, and it doesn't have to be this way now. To this end, the MIT Student Worker Alliance has put forth a petition calling for a six percent Cost-of-Living Adjustment increase for all employees, to begin to address our rapidly increasing cost of living. A full-time salary at MIT should be sufficient to support a person in a clean, safe, and hospitable home without their needing to subsidize it with one or more additional jobs. We should not need to spend a large proportion of our waking non-working hours commuting. We should be able to pay our bills while also having time and energy for our families, friends, interests, and public service. These things make us better workers and better people and are simply part of basic human dignity.

If you agree, we invite you to join us and over a thousand other members of our community in signing the petition [3].

- Reference Links
1. Bureau of Labor Statistics CPI calculator: [https://www.bls.gov/data/inflation\\_calculator.htm](https://www.bls.gov/data/inflation_calculator.htm)
  2. "Prices for These 20 Items Are Rising Faster Than Overall Inflation" Money, October 13, 2022: <https://money.com/items-prices-rising-faster-than-inflation/>
  3. MIT Student Worker Alliance Petition: <http://tinyurl.com/MITinflationrelief>

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**Marathon**, from Page 6

In retrospect, it was refreshing to avoid the noise and clutter of digital technology — to not do anything but walk. To my surprise, the long walk didn’t feel that mundane. There were a couple of times I tried to occupy my thoughts with something, but overall I allowed my mind to simply wander and observe my surroundings, a state of mind that I rarely experience on campus.

As I walked, I entered this state of being present, a sensation I wish I experienced more regularly. I stopped thinking about what was going to happen in the upcoming week — next problem set deadline, next midterm date, next meeting appointment. The goal now was to focus on making each upcoming mile and reaching the finish line. I simply paid attention to the road ahead of me and made observations of each place I walked past, from the amusingly-named Big Boi Meat Market to a cute window display of the Boston Marathon mile 10 marker.

Although Boston felt far away, it was still nice to reach the markers stationed every half-mile. Each marker sign featured a picture and quote from a patient. Although there were patients of all ages, most were children. It was touching to read their words of appreciation for the Jimmy Fund and the Dana-Farber Cancer Institute. Despite how much pain they had to go through from treatment, their faces beamed with joy and some shared their aspirations and goals for the future. Taking time to pause and learn about these Jimmy Fund Walk heroes gave the fundraiser a more human touch, as I had a better understanding of how the money I raised was going to help people like them.

After walking through Natick, I was delighted to see the town of Wellesley sign and a change in scenery. I was getting close to mile 13 in the heart of Wellesley. There were lush, green trees right next to the road and the pond was crystal clear. Some cars whizzed by, but overall the road was quiet. The tranquil, peaceful setting was perfect for solitude. Having not much to do, I attempted to sing some songs from my childhood, such as “Hey Soul Sister.”

Up until mile 13, my legs were fine and I didn’t feel any pain. I predicted that my legs and feet would start to feel pain around mile 20, but unfortunately the pain started much earlier. Once I passed the halfway marker and entered Wellesley Square, I decided to sit down on a bench and change my pair of socks. As I raised my left leg to put on my new socks, a sudden surge of pain went through

my entire leg. I’m not sure what caused this to happen, but it felt like I pulled a muscle.

I was surprised that this was already happening around mile 14. While I did follow the recommended training schedule in the summer, I ran half of the distance and walked the other half. As a result, I didn’t take into account how walking causes more time to be spent on each foot compared to running. I winced and waited for a minute or two to let the pain subside. I hoped that things would get somewhat better after that incident, but I started to feel foot pain that ended up persisting for the rest of the journey, and my feet swelled to the point that I wished my shoes could grow an extra inch or two. I wondered how I was going to keep walking like this for 12 more miles.

For the latter half of the walk, I walked gingerly, as each step felt robotic. My feet felt like they were on fire from the constant friction with my shoes. Each mile felt longer than the one before, and I couldn’t wait to see the town sign for Newton. While the pleasant landscape of each town along with the novelty of walking the Boston Marathon route distracted me from thinking too much about the physical pain, I started questioning why I even signed up for this in the first place. Did I forget from reading online articles that I was probably going to get blisters and not be able to walk for a couple of days?

**My feet felt like they were on fire from the constant friction with my shoes. Each mile felt longer than the one before... But I told myself to think about kids like Bryce.**

But I told myself to think about kids like Bryce. The physical pain they experienced from hospitalization and chemotherapy was beyond my comprehension. Despite these challenges, they were grateful and happy for many things in their lives, like their families and patient care teams. I then thought about the people who walked in memory of loved ones that passed away from cancer; the emotional pain that came from mourning and grieving was magnitudes more than what I was feeling.

I had no good reason to complain: the pain I experienced from this walk was nothing compared to that which patients and their loved ones experienced. In my case, there were four more hours to go and the post-walk pain would last at most two or three days. For many others, however, the pain they underwent was an ongoing or long-term process. I also thought about other participants who have done this fundraiser for many years to walk the same journey again and again, as well as walkers who were much older than me. Inspired by the people around me and the patients I learned about from the mile markers, I decided that the pain was worth it and kept going. I couldn’t give up on my fundraising pledge.

As with previous towns,, the walk in the town of Newton took a long time. I expected Heartbreak Hill to be very steep and daunting, but it turned out to be more approachable given that I was walking the whole thing. After passing by many houses on Commonwealth Avenue, I finally reached Boston College in Chestnut Hill. I couldn’t believe that I was getting close to Boston. Sure, I was still far from Boylston Street, but now I felt like the goal was within my grasp.

I remember the last hour as a series of vignettes that when compiled together, feel like a time-lapse. I processed time like a clock counting down to 0. I couldn’t believe that there was only an hour left when I entered Boston’s Brighton district. After a brief time there, I walked along the Green Line in Brookline and checked my watch. There were 40 minutes to go. Yes, I still felt foot pain, but happiness began to overtake me. Reaching the finish line that once felt so far out of my reach now felt possible.

My surroundings didn’t become familiar until I saw the iconic Citgo sign near Fenway Park. In 20 minutes, my whole experience would be over. I was only a mile away from the finish line. What was 20 minutes became 15, then 10 as I passed by Fenway-Kenmore and entered Back Bay. At mile 26 on Boylston Street, I started walking faster so that I could reach the end and relax for once. After walking the last 0.2 miles, I finally crossed the finish line in Copley Square and completed the 2022 Boston Marathon Jimmy Fund Walk.

When I reached the finish line, my legs were exhausted. At the same time, I was so proud that I did something that I had thought was impossible not too long ago. Participating in the Jimmy Fund marathon walk taught me so many lessons. Meeting people from various backgrounds along the way provided me with a greater understand-

ing of the unfortunate realities that many cancer patients have to face on a day-to-day basis. Not only that, but talking to people from various backgrounds along the way was also moving, as they were all determined to help in any shape or form with battling cancer.

**Why did they have to be subjected to so much pain and have their childhood taken away from them? Why was life so unfair to them? Why did they have to consider the possibility of death or a shorter lifespan at such a young age?**

I thought that my thoughts would quickly revert to matters related to school when I returned to my dorm, but I still thought about all the lessons I learned from the Jimmy Fund marathon walk. Wanting to know more about the children featured on the mile markers, I decided to go on the fund’s website. As I read quotes about their passions and saw their angelic faces, tears welled up in my eyes. Initially, the rational side of me didn’t understand why I wanted to cry for people I never knew personally or met in real life, but the recurring question of “why” kept ringing through my head. Why did they have to be subjected to so much pain and have their childhood taken away from them? Why was life so unfair to them? Why did they have to consider the possibility of death or a shorter lifespan at such a young age? Topics I rarely thought about such as life and death never felt so close until now.

Yet, amid the despair I felt at the moment, I thought about how strong and resilient these patients were as they underwent many rounds of cancer treatment. Instead of feeling even more hopeless, I left feeling inspired by their stories. While the things I saw along the Boston Marathon route and particular conversations I had with others may fade, I will never forget how the walk changed my outlook on confronting life’s challenges with hope and optimism and taught me about the strength and resilience of those who do so every day.

CAMPUS LIFE CAMPUS LIFE CAMPUS LIFE CAMPUS LI

It would be *turtley* awesome if you join **The Tech**



Email us at [join@tech.mit.edu](mailto:join@tech.mit.edu)

# Happy Holidays

Solution, page 3

			2				4	
1	3						8	
8				6	3	9		7
		4			6			5
		7	8		1	4		
2			3			7		
7		1	6	3				4
	9						3	6
	5				2			

Instructions: Fill in the grid so that each column, row, and 3 by 3 grid contains exactly one of each of the digits 1 through 9.

Solution, page 3

1 Video game pioneer  
6 Ship's skipper, for short  
10 Woes  
14 Gives a darn  
15 Share a border with  
16 Trevor of The Daily Show  
17 Do what's especially appropriate  
20 Otherwise  
21 Sees the point of  
22 Smartened (up)  
23 Guru  
25 Roadside restaurants  
26 Was sold very cheaply  
31 Nautical "Halt!"  
32 Pair of people  
33 Demonstrate  
37 Cup's edge  
38 "Now listen . . ."  
42 December 24 or 31  
43 Defendant's statement  
45 Needless fuss  
46 Concur  
48 Affected someone

emotionally  
52 Interrupts, on a dance floor  
55 Tunnel's sound effect  
56 Very pale  
57 Attention-getting sound  
59 Minor mistake  
63 Started acting differently  
66 Campground shelter  
67 Hunter's garb, for short  
68 Long-necked marsh bird  
69 Annoys  
70 Prophetic sign  
71 Blissful places

- 1 Muscle soreness
- 2 Back of a comet
- 3 \_\_ and crafts
- 4 Makeup exams
- 5 Suffix meaning "sort of"
- 6 Line of work
- 7 Slightly
- 8 Dogs with flat faces
- 9 Utmost degree
- 10 Baseball game segments

- 11 Not at all tight
- 12 In a little while
- 13 Storage buildings
- 18 Toaster waffle brand
- 19 Exact double
- 24 Matinee times: Abbr.
- 25 Place for a keyhole
- 26 Twist out of shape
- 27 Wicked
- 28 Phone directory listing
- 29 Committee descriptor
- 30 Take legal action
- 34 Guy getting a medal
- 35 Higher than
- 36 Unwanted garden growth
- 39 Deserve to receive
- 40 End of a university URL
- 41 Apiece
- 44 Gives approval
- 47 Wrote uncredited for another
- 49 Little bell's sound
- 50 Enthusiastic about
- 51 Highest point
- 52 Spiny desert plants

1	2	3	4	5		6	7	8	9		10	11	12	13
14						15					16			
17						18					19			
20						21					22			
				23	24				25					
26	27	28						29	30					
31								32				33	34	35
37					38	39	40				41		42	
43				44		45					46	47		
				48	49					50	51			
52	53	54							55					
56							57	58				59	60	61
63						64					65			
66						67					68			
69						70					71			

53 Theater worker  
54 Express gratitude to  
57 The first person  
58 Where you live  
60 Angler's gadget

61 Close \_\_ (approach)  
62 Signing ceremony  
souvenirs  
64 Earth-friendly prefix  
65 What to call a spaceship

## [2707] Astronomy Numbers



I GET SUSPICIOUS  
WHENEVER I SEE A  
NORMAL NUMBER IN  
ASTRONOMY. WE'RE NOT  
SUPPOSED TO HAVE  
THOSE. FEELS WRONG.  
SCALES SHOULD ALL  
BE INCOMPREHENSIBLE.

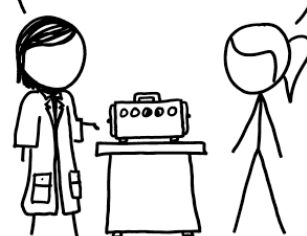


### EARLIER, AT THE VET:

YOUR CAT WEIGHS 12 LBS.  
| RIDICULOUS, NOTHING  
WEIGHS "12". YOU MUST  
MEAN  $10^{-20}$ ? OR  $10^{40}$

FINE. YOUR CAT WEIGHS  
 $3 \times 10^{-30}$  SOLAR MASSES.

OKAY. BETTER.



I adopted a cat that weighs 12 solar masses. Laser pointers love chasing it.