Cost of housing is rising steadily

MIT tries to keep costs down in the long-term with energy efficiency, Humphreys says

By Bruno B. F. Faviero

How expensive is it to live on campus? For the past few years, the cost of housing at MIT has been steadily rising. In the 2007-2008 school year, the average cost of living in a single or double room in a dormitory was $2,923, which rose in the following years by eight, seven, four, and five percent, respectively. The average cost today is $3,652.

Senior Associate Dean for Residential Life and Dining Henry J. Humphreys said that the main factors affecting rate hikes are the cost of operations, debt service of the buildings, and costs associated with upkeep, repairs, and renovations. “We’re always doing improvements,” said Humphreys, “but the general principle is that we try to keep rates as low as reasonably possible.”

To keep operating costs down, most buildings undergoing repairs are being made more energy-efficient. In New House, the air conditioning system was replaced this past summer to use less electricity. Campuswide, MIT is also installing energy-saving lights, motion sensors, and efficient heating systems in buildings as they are being renovated. “We’re taking advantage of renovation to use high-quality replacement materials that are factors that might slightly increase costs every year, but could potentially decrease costs every year, but will maintain that; I don’t see large jumps needing to come along at this point,” he said, adding that MIT manages its money well.

Other measures used to keep housing costs down include distributing the debt service among all the dormitories, so that there are no drastic differences between the costs of buildings. “In some schools … one building might cost $15,000 to live in and one might cost $8,000 to live in, and you create economic disparities amongst students, said Humphreys.

“Generally, when surveys are done of students — why they pick a building — it’s mostly not based upon cost, it’s based upon culture and where their friends live,” he said.

MIT, unlike other schools, charges “room and board” separately, so Humphreys, because MIT has both dining and housing, can “cook-for-yourself communities.” Although dining halls do not directly affect the cost of housing, students in dining dorms are required to enroll in dining plans. This requirement drives up the price of living in a dining dorm.

Besides dining, the difference that the costs stay down,” said Humphreys. He added that the rate increases have remained constant in recent years. “The rate increases have stayed level for the last several years, and I anticipate — as the Institute becomes more energy efficient — that we will maintain that; I don’t see large jumps needing to come along at this point,” he said, adding that MIT manages its money well.

MIT research in The Big Bang Theory

Neutrino research experiments featured on television

By Leo Zhou

The Big Bang Theory is the flagship show of television nerdiness — being featured on the show means that, in some way, you reach over 15 million viewers. Physics professor Janet Conrad and many in her research group have been studying neutrinos with the Double Chooz experiment in France for a few years. Little did they expect to see their work on mainstream television last December.

On Dec. 8, 2011, an episode of The Big Bang Theory — the popular CBS sit-com about the daily life of brilliant yet socially awkward Caltech physicists — featured in its background some of the most recent results from the Double Chooz experiment.

Neutrinos, first hypothesized as unreactive particles in 1930s and experimentally detected in 1956, can have these “flavors” — electron, muon, and tau. They were recently made famous when the OPERA experiment detected neutrinos traveling faster than the speed of light, which was a major violation of the commonly accepted Einstein theory of relativity.

Neutrinos were proven in 2001 to “oscillate” between flavors when they travel through space. Conrad and her colleagues are studying the details of this quantum mechanical effect termed “neutrino oscillation.” They are using the Double Chooz experiment to find a particular parameter called theta13 (θ13) of neutrino oscillation, which can provide more insights into how neutrinos behave.

The Double Chooz experiment — a collaboration of over 86 scientists from eight different countries — takes advantage of electron antineutrinos generated as byproducts from the Chooz nuclear reactor in northern France. Lindley Winslow, a postdoc in Conrad’s group, said that they chose the site because it had two of the most powerful fusion reactor cores in the world.

According to Winslow, their most recent experimental results showed a nonzero value of theta13 at about 1.6 ± 0.25 degrees. That means, even though the results are promising, the probability of the results being purely by a statistical fluctuation is not negligible. The experiment will continue to run

18,088 applicants for Class of 2016

MIT received 18,088 total applications for the Class of 2016 — 12,090 in the Regular Action cycle and an additional 6,004 applications for the Early Action cycle that finished in December. This marks a 1 percent increase from last year’s 12,080 applications, which is significantly lower than the increases in recent years. The number of applications for the Class of 2015 increased 8 percent from that of the Class of 2014, which was a 6.2 percent increase from the year before.

The admissions office is aiming to admit enough people to result in a class of about 1,130 students. This would be about the same size as the Class of 2005.

In an email to The Tech, Dean of Admissions Stuart Schmill ’86 says that the admissions office is predicting a slightly higher yield — the percent of people who accept their offer of admission — than last year. They predict this because the reinstatement of early admissions programs at Princeton and Harvard means that the number of cross-admits will likely decrease. The yield for the Class of 2005 was 65 percent, which is around where MIT’s yield historically hovers.

— Jaye Navin

WEATHER, p. 2

WED: 56°/33°F
THU: 52°/21°F
FRI: 40°/26°F

IN SHORT

Online Registration is now open! Registration submitted after Friday, Feb. 3, is subject to a $50 late fee. Go to http://regis-tration.mit.edu.

Add forms for IAP classes, including IREBP0S for credit, at a $10 fee due by Feb. 3.

Quarter 3 PE Registration opens online today at 8 a.m. Go to http://mitsport.com.

Send news information and tips to news@tech.mit.edu.
Riding personal data, Facebook is going public at $80–100 billion

As tornado season begins, Alabama focuses on warnings

CENTER POINT, Ala. — The sound of a tornado ripping off Sheila Wright's roof shook her out of a deep sleep early on Jan. 23. She and her three children had gone to bed without knowing that the night would be about to bear down on their neighborhood near Birmingham.

Last April, 248 people died in Alabama in a single day when more than 60 tornadoes hit. Meteorologists blamed the weather pattern known as La Nina. Now, with a similar but less intense chapter of the La Nina cycle bringing early storms, residents are looking to the skies with more wariness.

And like Wright, they realize that they have to make use of what one townsidelong-time weather watcher calls “the new normal.”

"You just don't think these things are going to come down anymore," she said. "I'm going to have to watch the news all night now." Officially, residents are urged to do more than watch television. A National Weather Service website offers radio systems specifically designed to monitor government alerts, as well as apps on cell phones and other technology, to keep on top of potentially deadly storms.


Weather Clouds Expected for Groundhog Day

By Vince Agard

Tomorrow is Groundhog Day, the annual event on which the famous rodent resident of Punxsutawney, Pennsylvania predicts whether winter will last another six weeks, or yield to an early spring. The groundhog, known as Punxsutawney Phil, will emerge from his burrow each Feb. 2 to check on the condition of the skies.

If he sees his shadow upon emerging, he will be frightened back into his burrow for six more weeks of hibernation. However, cloudy conditions around Groundhog Day tomorrow, meaning the groundhog will stay above ground, thereby predicting an early spring. 

The official Groundhog Day predictions have only been correct 39% of the time historically, so Phil may not be the best medium-to-long range forecast. Meanwhile, here in Boston, strong southerly flow will ad-

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The Tech

By Jeff Zeleny and Jim Rutenberg

TAMPA, Fla. — Mitt Romney rolled to victory in the Florida primary Tuesday, dispensing withInsurgent-American threat from Newt Gingrich and reclaiming his dominant position in the race for the Republican presidential nomination.

The commanding win by Rom-

ney offered a forceful response to the concerns that were raised about his candidacy only 30 days after a stringing loss to Gingrich in the South Carolina primary. It also raised new questions about whether Gingrich can persuade Republicans of his electability.

"I stand ready to lead this party and to lead this nation," Romney told supporters here, urging Republicans to remain united and to focus on the party’s goal of defeating President Barack Obama.

The outcome of the Florida pri-

mary promised to reorder the realm of the Republican field. Sensing vulner-

ability in Gingrich, Rick Santorum began an advertisement in Nevada and Colorado compar-

ing Gingrich’s positions to the dual Democratic villains of Rep. Nancy Pelosi and Obama, saying his sup-

port for policies, including the Wall Street bailout was “a slap in the face to the Tea Party.”

The victory by Romney, which was built by a diverse coalition of the Republican electorate, allowed him to return to the hard job of pulling together a divided party and begin anew his argument that he has the best chance to beat Obama. Yet Gin-

nich’s candidacy was evidently not yet dead. He said he would campaign in the race, with a “46 states to go” sign hoisted at his election-night party in Orlando.

Yet advisers to Romney pointed to his success here as a harbinger of his strength in a general election challenge against Obama. No state where Republicans have competed this year is more reflective of the nation’s geographical, political and ethnic diversity than Florida, and its complexity seemed to help Romney to turn back the grassroots coalition that Gingrich had been countering on. 

“Primary contests are just easy, and they’re not supposed to be,” Romney said in his victory speech. “Our opponents in the other party have been watching and they’re likely to come back and compete them where the competitive primary will be. In Florida we’re going to divide us. It makes us better, and we will win.”

Romney’s support in urban ar-

eas with concentrations of affluent and retired Republicans was enough to overcome Tea Party support-

ers, evangelicals and self-described “very conservative” voters who have become influential around Gin-

nich — although he also seemed to gain strength among Tea Party supporters.

The night also raised questions about Gingrich’s strength moving forward. If there was one part of the state with a countermomentum, it was its northern panhandle, which resembles the nation’s South. Gin-

nich and Romney were equal sup-

port there, according to surveys of voters leaving polling stations — giv-

ing hope to Gingrich for the com-

ing Southern contests and pause to Romney, who struggled for traction in South Carolina.
CBO says economy is projected to remain sluggish

By Robert Pear

WASHINGTON — The Congressional Budget Office on Tuesday projected that the economy would remain sluggish in the near future and that the federal budget deficit would exceed $1 trillion in 2012 for the fourth consecutive year.

The deficit will be $1.1 trillion in 2012, which is $80 billion less than in 2011, and will fall sharply in the next three years as a result of the combination of higher taxes and spending cuts required by existing law, the agency said, a forecast that reflects the fiscal outlook.

However, it said, that same combination of higher taxes and spending will bring the budget and economic outlook.

“Despite a number of positive developments in the last two years, the outlook for the budget and the economy is not good,” said Douglas W. Elmendorf, director of the Congressional Budget Office. “The deficit will be $1.1 trillion in 2012 and $700 billion in 2013, according to the report, and will climb to $558 billion in 2014. In other words, the report suggests, doing nothing may be the only way for Congress to slash the deficit and the debt.”

The report provided grist for the political debate of the fiscal outlook, and the report was released ahead of the election.

The deficit is projected to exceed $2.5 trillion this year and just 1.1 percent in 2013.

For the fiscal year ending in 2014, the budget office said, the deficit will fall to $558 billion in 2014. Both parties are trying to control spending.

Under an alternative scenario, the report said, the deficit would still drop below $1 trillion, but not as much as the Congress would recommend if it cut spending and raised other budget-balancing measures.

As Syria wobbles, Iran feels the weight of an alliance

By Rick Gladstone

In a sharp answer to Amazon and its expanding publishing efforts, Barnes & Noble said Tuesday that it would acquire 60 percent of the digital rights to dozens of books released by Amazon in its bookstore. This agreement is likely to give Barnes & Noble a strong position in the coming book wars.

It would completely change the publishing in the long run. Assuming no change in current plans, the outlook for the economy — measured by the gross domestic product, adjusted for inflation — will grow 2 percent this year and just 1 percent in 2013.

By Julie Bosman

BRUSSELS — The European Central Bank may forgo future profits on its Greek bonds as efforts remain under way to fill a funding gap that has been widened by the decision to give up future gains without taking a loss, said a European official, requesting anonymity because of the sensitivity of the issue.

The precise financing gap for Greece is a matter of private-sea sector investors agree, as expected, to take losses in excess of 50 percent on their Greek debt and allowed Greece to hit its target ratio of debt to gross domestic product of 120 by 2020. By 2014, the deficit will be resolved before Greece can qualify for a second bailout, expected to total about 130 billion euros ($170 billion).

—Stephen Castle and Jack Ewing, The New York Times

Repeat breast cancer surgery guidelines found unclear

Some women who have lumpectomies for breast cancer may then undergo second operations they do not need, because guidelines for deciding who requires repeat surgery are not new.

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**LETTERS TO THE EDITOR**

**Massachusetts must provide dedicated and continuing funding grants directly to the MBTA for capital expenditures and write off the MBTA’s prior self-supported debt from earlier capital expansion projects.**

By Alex Lu

Over the past few years, the MBTA has made great strides in reducing costs and improving service, making Boston’s system the most cost-effective in the Northeast cities. However, Forward Funding Legislation, which requires the MBTA to have sufficient revenue to pay for capital projects, is dedicating increasing fractions of the annual operating budget to fund interest payments. This benefits no one except capital markets that have an interest on the dollars of capital increase or service cuts can solve the MBTA's deficit alone.

Cutting service or increasing fares for debt repayment contricts the capital program’s purpose: it’s like buying a home and choosing not to live there, saving money on utilities and using those savings to pay off the mortgage. The MBTA needs to seek external funding to close the funding gap versus fare and service changes. These changes — a 43 percent fare increase and up to 77 percent service reduction — eliminates off-peak and suburban transit, a life-line to many Commonwealth residents and suburban municipalities, particularly in the Route 128 corridor. This will have a detrimental effect on all of us. (Not to mention that it’ll not only leave "Charlie" riding forever and ever all around Hingham instead of the Spirit of Massachusetts.)

There are important issues the MBTA must address. They include: (i) eliminating any intersection configuration that cannot be found in Haverhill and Hingham after 10/09; (ii) providing proper sight distance to all drivers; (iii) improving service and projects will indefinitely and putting lives at risk. Replacement must take place on a continuing basis.

If sufficiently neglected, catastrophic failure could make the MBTA service cut and service indefinitely and putting lives at risk. Replacement must take place on a continuing basis.

It’s also bad for the environment. Cutting service for debt repayment will not only lead to more private automobiles. This increases highway infrastructure needs (and overall transportation costs) increases petrol consumption, and contributes to more air quality problems, resulting in more respiratory illnesses. While automobiles are becoming cleaner and cheaper with modern technology, the MBTA could also benefit from new clean-air technologies but further reduces pollution by allowing many passengers to share the same bus or train.

I propose service reductions are unacceptably for the Commonwealth’s future. Massachusetts must provide dedicated and continuing funding grants directly to the MBTA for capital expenditures and write off the MBTA’s prior self-supported debt from earlier capital expansion projects.

Finally, traffic congestion and the parking situation in Boston will go from bad to worse when the MBTA cuts capital program has the potential of driving work for flexibility. If parking increases or the cost of living increases on the downtown core, the increase in land use or construction costs, economic development would be handicapped. We need a much bigger infrastructure, either. Cutting the capital program to a "solution" to future infrastructure needs (as has been suggested) is harmful in two ways:

1. It will result in a state of disrepair. Transit infrastructure requires periodic maintenance and renewal. Deferring important maintenance and repair work will eventually result in a failure-prone and unsafe system with inefficient components and technologies, costing even more to fix later.

2. If sufficiently neglected, catastrophic failure could make the MBTA service cut and service indefinitely and putting lives at risk. Replacement must take place on a continuing basis.

Pick up the phone and call a representative. They need to know that transit service is important to the MIT or local community. "Charlie" is the MBTA and MBTA needs exists; they cannot always afford a car.

**Massachusetts must provide dedicated and continuing funding grants directly to the MBTA for capital expenditures and write off the MBTA’s prior self-supported debt from earlier capital expansion projects.**

**LETTERS TO THE EDITOR**

**Vassar/Mass. Ave. intersection needs closer scrutiny**

Ethan A. Solomon ‘10

Art article raises more questions than answers about Phry-Kyns death on Dec. 27. I was actually at the intersection shortly after the accident and want to add my observation to the investigation to raise serious concern. The truck involved in the collision was not able to make the turn. There was simply not enough room and the driver blocked several lanes of traffic. Indeed, this intersection is not suitable for the volume of heavy equipment that passes through it on a daily basis. Clearly, the MBT and Cambridge Police are well aware of the danger that such an intersection configuration poses and have done nothing to protect the students and others that use it. Moreover, the university continues to diagnose or remain willfully ignorant of these problems by not demanding the development of a remedy; and, there are remedies.

On the evening of Dec. 27, the driver was making a turn that caused the vehicle to block nearly all lanes of traffic. Such large trucks should never be permitted to make this turn given the vehicle’s size and configuration of the intersection. In the process of turning, the driver blocked all traffic lanes, including the oncoming traffic. He was using his. Bicycle impacted the truck, the driver stepped on the gas and drove away. At the time I drove by, MBT and Cambridge Police and rescue personnel were fully engaged in his rescue.

Careful journalism would indicate that some assumption in the rules to which the driver was subject in effect would be helpful. The MBT needs to encourage responsible journalism to re-examine the exact circumstances. Ultimately, responsibility will be determined by the public, the police, and the courts. Moreover, the university continues to diagnose or remain willfully ignorant of these problems by not demanding the development of a remedy; and, there are remedies.

A correction that ran on January 25 gave the class year of C. Scott Auman as ’97. He received a B.A. in 2007, not a bachelor’s degree.

**LETTERS TO THE EDITOR**

**CORRECTIONS**

**OPINION**

**Editorials are the official opinion of The Tech. They are written by the Editorial Board, which consists of Chairman Joseph Maurer, Editor in Chief Ethan A. Solomon, Managing Editor Connor Kirschbaum, Editorial Assistant Aislyn Schalck, and Columnists Nina Smillie, Brandon M. B. G., and Angelina Wang ‘19.**

Discons are the signed opinions of editorial board members choosing to publish their disagreement with the editorial.

Letters to the editor, columns, and editorial cartoons are welcome. All individuals and representatives of the opinion of the authors, not necessarily that of the newspaper. Electronic submissions are welcome, and should be submitted to editor@tech.mit.edu. Hard copy submissions should be addressed to The Tech, P.O. Box 397029, Cambridge, MA 02139-7029, or sent by interdepartmental mail to Room W20-483. All submissions are due by 4:30 p.m. two days before the publication date.

Letters, columns, and cartoons must bear the authors’ signatures, addresses, and phone numbers. Unsigned letters will not be accepted. The Tech reserves the right to edit and condense letters, shorter letters will be given higher priority. Once submitted, all letters are considered for publication. The Tech reserves the right not to publish letters, and this right will not be returned. Letters, columns, and cartoons may also be posted on The Tech’s Web site and/or published in other form or medium now or later that becomes known. The Tech makes no commitment to publish any submission.

Guest columns are opinions submitted by members of the MIT or local community.

TO REACH US

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We owe responsible action in Kyaw’s memory. The university and the student government should demand action by local authority.

Hopefully, students and pedestrians reading these two articles will be strongly encouraged to avoid these major intersections lest they become the 56th contributor to traffic hazard statistics. I would also encourage The Tech to invest a bit more time toward investigative journalism. Phyo Kyaw should have been explored and would likely indicate that if a driver makes a turn, blocking oncoming traffic lanes creates a serious safety hazard — a reason why so many accidents have happened at this intersection.

Given that this intersection is often used by heavy equipment, buses, etc. there are a number of obvious solutions:

1. Redesign of the curb cuts on either side of the road. An increased curb cut would permit a turning vehicle more room to make the turn. There is enough room on all but one corner to make an alteration.

2. Truck routes/should not include this corner if possible. Thus, extended length tankers should be restricted from this intersection until a solution is designed/implemented. As you probably know, buses — about the length of the tanker truck — do not make this turn because of the narrowness of the road.

3. Traffic signals need to be modified. Pedestrians and bike users are at considerable risk on a daily basis. Right turn on Red should be prohibited at this intersection for large commercial vehicles. We have often seen right turning vehicles impact bicycle riders at all corners. An alternative would be to signal to require bicycle riders to walk through the intersection and prohibit right-turn on red at all corners. Special bicycle turning signals should/could be installed.

4. Police Coordination. Heavy equipment moves through this intersection daily and all hours in the evening. Given the nature of the pedestrian traffic, heavy equipment should be banned from turning at this intersection and a separate truck route established. In the alternative, when access to this Vassar corner is needed, the police could be summoned — MIT and/or Cambridge.

Note that there are few circumstances that would require heavy equipment to use this corridor to reach MIT facilities. MIT Facilities Dept. who are expecting delivery by heavy equipment should be required to at least notify the MIT police and schedule deliveries at low traffic periods. Heavy vehicles should not be permitted to use Vassar to pass through to other routes. Currently, commercial vendors make extensive use of this Vassar Street corridor, endangering pedestrian and bicycle traffic. There is little or no MIT/Cambridge police enforcement in this area.

Traffic management is the responsibility of the local authority: City of Cambridge. However, given that this is a major roadway, near Memorial Drive, it is possible that the Federal Highway Administration and MassDOT assistance could be used — given the road classification. Because of the large number of accidents that have taken place here, the City of Cambridge DOT could/should be examined. As a Federal funds recipient, it is expected to use those funds to provide for public safety. Unquestionably, this has not happened. Thus, the City of Cambridge is probably in violation of their obligations under State and Federal guidelines to ensure public safety. Certainly MIT is in a position to ask for and expect an examination of the City of Cambridge DOT so that this does not happen again and demand an immediate solution. The immediate solution is a 24 hr traffic director (person) stationed at this intersection until a solution is implemented given the very serious hazard to public safety.

Under Federal and State requirements, there is nothing more important than safety. Absolutely nothing. This has simply not happened. I was astonished to learn that there have been 50 accidents. Clearly, the City of Cambridge has decided that commercial traffic is more important than the safety and lives of pedestrians and MIT students. I also strongly recommend that you consider revising editorial guidelines for such future stories. Not all library research could go a long way to identifying that the City of Cambridge is ultimately at fault and may have placed both the truck driver and Phyo Kyaw on a fatal collision course. Reasonable people are available. Why none have been implemented is unconscionable.

David Pablo G
Wait, isn’t it just a career fair?

Nope! Techfair is a demo-focused event where companies and students exhibit their latest projects. Bring your curiosity, but leave the suits at home!

(If you really want to connect with our 60+ companies, check out our résumé drop.)

Events

**MIT-Harvard-Brown Hackathon**
Feb. 4 - 5, 8 PM - 5 PM
26-152
Code all night at our Facebook sponsored hackathon! Free swag, food, and caffeine for all. Winners get a trip to Facebook HQ. Sponsored by Facebook. Sign up at techfair.mit.edu/hack

**Résumé Drop**
Feb. 5, 11:59 PM deadline
Drop it like it’s hot - get noticed by our 60+ exhibiting companies!
Upload your résumé at techfair.mit.edu/drop

**Banquet**
Feb. 6, 6 - 8:30 PM
Cambridge Hyatt
An exclusive opportunity to connect with company representatives. By invitation only - get yours by dropping your résumé and attending the fair.

**Techtalks**
Feb. 11, 11-5 PM (on the hour)
10-250
Hear industry leaders and visionaries talk about their perspectives on tech. Speakers and schedule at techfair.mit.edu/events/talks

**Afterparty**
Feb. 6, 9 - 11 PM
Media Lab, 6th floor
Last party of IAP! Eat, drink, and dance against the Boston skyline. Xbox, Windows Phone, and Kinect raffles. Sponsored by Microsoft. Open to all MIT students.

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Facebook
Many factors determine different housing costs

Differences in price explained by ‘three tier’ system of classification for dormitories

Housing, from Page 1

rances between residence costs is based on the quality of the facilities and operating costs. MIT places its dorms into “three tiers,” according to Humphreys. Tier one consists of newer dorms with better facilities — and also higher costs of opera-

and operating costs. MIT places its Manage to include it in the show.

The Big Bang Theory, from Page 1

until 2017, and they hope to obtain a result with at least 3 sigma.

David Saltzberg, a Professor of Physics and Astronomy at UCLA, works as the science consultant for The Big Bang Theory in his free time. He said in an email to The Tech that he was impressed when the Double Chooz experiment released their first results on Nov. 9 last year, and decided to include it in the show.

Winslow, who actively follows The Big Bang Theory, was surprised when she found drawings related to the Double Chooz experiment in the show’s background last December. She had just given a talk about the experiment using these particular drawings at UCLA on Nov. 30. Unfor-
collectedly, Saltzberg said he was away when Window’s talk occurred, and used similar drawings from the re-

results released on Nov. 9 instead. The Big Bang Theory also seemed to reference work done by Professor Alexander van Oudenaarden before he became a professor of physics and biology at MIT. In an earlier episode aired in December 2009. In this episode (Season 3 Episode 10), the main female character Penny was jealous that she couldn’t relate to her boyfriend Leonard about his work as a physicist. She then asked for help from another physicist char-
acter, Sheldon, who taught her to re-
cite the following speech to Leonard later: “Recently I’ve been thinking about challenging and saying ‘why this, why that, and … they are very good about making sure that we…”

Humphreys mentioned that MIT is trying to systematize the process that determines which buildings get renovated and how. Though costs might rise as dorms and other buildings are “maintained at the standard that they should be or brought up to the standard that they should be,” costs increases should remain con-

stant in the years to come.

MIT and UCLA researchers see their research on TV

Physics professors surprised by Double Chooz experiment appearing on The Big Bang Theory

Many factors determine different housing costs

Differences in price explained by ‘three tier’ system of classification for dormitories

Technodoku

Solution, page 10

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.

Sudoku

Solution, page 10

Instructions: Fill in the grid so that each column and row contains exactly one of the numbers 1–6. Follow the mathematical operations for each box.
ACROSS

1 Deluxe 1980
10 Image Award presenter 31 Doremi
15 Rashly 32 Feather tip
16 Hait 34 Columbus sighting of 34 Columbus sighting of
17 Looze big 1493
18 Hartford-based company 36 Cookie monster
19 Hampton Court Palace 37 Glockenspiel accessory
architect 38 Origin of many drafts
20 Flawless 40 Ray heating stoves
22 Soused 41 Upholder of rights
23 One of the Titans 42 First customer for the
24 “The Imp of the 44 Word from the Latin for
Perverse” author 9 public”
25 Cru chief’s concern 45 Dog groomer’s goals
26 Ouch! that’s concern 46 something raised by
27 800 is the top of its scale: Abbr. aerobic exercise: Abbr.
28 Brace complement 47 Casting need
29 Dude 48 Broadcasting debut of June
30 Book prophesying 51 Cork locale
Jerusalem’s destruction 52 Rime ___ (poetic use of
31 Where Pamplona is homophones)
capital 53 Furnish for free
32 Sordid 54 One not to be trusted
33 Where Pamplona is 55 “There is real __ in
capital 56 Poaching setting
34 Columbus sighting of 57 Sight from Heinz Field
1493 58 Chance
40 Ray heating stoves 59 Legend source
41 Upholder of rights 60 Flashing setting
42 First customer for the
Boeing 787 61 Game with traps
43 Remote targets 62 Cable installer’s devices

DOWN

1 Lost at logrolling 7 Ogil
2 Back-to-back 8 Patron of Titan
3 This way 9 Garland’s sister in Summer
4 Bill-passing watchdogs Stock
5 Energy Star program creator
6 Razzie Award, for instance
7 Ogil 7 Cruise
8 Patron of Titan 13 Crony
9 Garland’s sister in Summer Stock
10 GI Bill of Rights advocate 14 Growth-factor source
11 Not received 21 Oscar/Emmy/Tony winner
12 “Thrall!” 22 Back-to-back
13 Crony 23 Live music venue
24 Milieu for expert driving 24 Milieu for expert driving
25 Put Nixon, originally 26 Pat Nixon, originally
26 Pat Nixon, originally

Stumper Crossword
Suckville is considered by the Census Bureau to be part of the Detroit metropolitan statistical area, despite not being located anywhere near Detroit.
Dr. Grammaphile

By Deena Wang

"You're dog was tracking mud all through there house. I was literally so em- barrassed that I thought I'd die!"

If that sentence sent you into frothing paroxysms of rage, you’re not alone. I was once a self-declared grammar stickler, a nit-picky lit freak. There was a time when I'd deface my Dungeons and Dragons source manual with red ink, zeroing in on a miss- ing comma and dashing a blood-colored smatter on the page. My particularity with punctuation led me to write the word "e- mail" with a hyphen and type in full gram- matical sentences even when I had a num- ber-pad cell phone. Since I was reading at a "12th grade" level in elementary school, I sprinkled words like "redolent" and "in- denity" into my standardized test essays. I even made sure my god-awful Sphenhos Cloud fan fiction had proper spelling and punctuation. Even if the content was ste- reotypical and disturbing, at least it had reotypical and disturbing, at least it had punctuation. Even if the content was ste- reotypical and disturbing, at least it had punctuation. Even if the content was ste- reotypical and disturbing, at least it had punctuation. Even if the content was ste- reotypical and disturbing, at least it had punctuation. Even if the content was ste-

I realized that for all my haughty attitude, I had nothing to contribute; I didn’t post my abominable slash stories, role-play, or fill anonymous story requests.

Despite being so selective with my ap- proach, I rarely contributed to the fandom I pursued. I was simply "God Unto High," passing judgment upon the mere mortals and their human folly. I realized that for all my haughty attitude, I had nothing to con- tribute; I didn’t post my abominable slash stories, role-play, or fill anonymous story requests. Writing properly doesn’t help you write interestingly at all. In addition, I became aware of my own errors in my use of English. For years, I thought that "nonphased" meant "not bothered" when it really means the oppo- site. Due to a misremembered vocabulary hook, I believed "moot" meant "not wor- thy of debate" when it really means "highly debatable." For practical usage, there are rules in English that aren’t worth keep- ing track of. "A painting is hung, a man is hanged," or so it is said, but hardly anyone is hanged at all nowadays. In punctuation, style often conflict, so there is a grand conflict of whether to use the Oxford com- ma (the comma that goes before the "and" in a list of items) and Chicago style versus Associated Press style versus British style versus American style.

Eventually, I became inured to the soph- omorism of Youtube comments and people TYPING IN ALL CAPS, enough exposure can acclimate you to anything. And since English is a descriptive language and not a prescriptive one, if enough people write in an "incorrect" way, the dictionaries will pick it up, and it will become correct.

That doesn’t mean I can completely ig- nore grammar. I’m the goddamn Campus Life Editor after all. But it means I can ig- nore the little things, like using "Steve Jobs" as a verb, if the phrasing serves a greater purpose. I want to focus more on content and clarity of communication rather than splitting hairs on infinitives. These days, when I see a post on Red- dit with an obvious error, I make a note of it and move on. It’s not my job to edit the world. But if you insist you’re dying liter- ally, I might have to make that statement true.

Send your campus events to events@tech.mit.edu.

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*The Army Lab provides the intern's salary, which typically ranges from $2280/month to $2864/month depending on class year. Under certain circumstances the ISN can provide the intern with a supplement of up to $1500 to defray costs of local accommodations and travel.

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CONCERT REVIEW

Copland conductorless, and Stravinsky interrupted

BSO features individual sections in a conductorless first half of program; stunning performance of *The Rite of Spring* cut short on its final night

By Shelley Ackerman

With all of the drama and lack of a permanent conductor at the BSO, the orchestra found an opportunity to do something completely out of the ordinary for their concert series from January 21–24. The entire first half of the program consisted of different sections of the orchestra performing pieces for chamber-size groups — without a conductor. A conductor was used and eventually contracted for the second half of the concert and worked with the orchestra for the week leading up to the first performance. The second half of the concert featured Maestro Giancarlo Guerrero and his interpretation of Stravinsky's *Rite of Spring*, one of the most controversial yet brilliant pieces of repertoire in classical music.

The decision to feature individual sections in the first half of the concert proved to be amazing. The program began with Copland's *Fanfare for the Common Man*. The hall immediately filled with the pure tones of the brass section, leading to an overwhelming feeling of triumph and power. In many ways, it reminded me of that moment in a film when the winners emerged quickly shuffled to their seats. The orchestra, although the perplexity of such a masterpiece so abruptly interrupted the performance strengthened my appreciation for it.

The first half of the concert concluded with a performance of Tchaikovsky's *Serenade in C for Strings*. A common piece played by chamber groups of all levels, the string sections of the BSO showed the audience how the piece should actually be performed. After seeing this piece on the program, I figured that the musicians would find a conductor, or perhaps have a fellow musician sit in as conductor for the piece, as this is most commonly performed with one. However, as they started setting the stage for the performance I realized that not only would the group perform it in its entirety without a conductor, but they would be standing. The effects of this curious arrangement were immediately apparent: The musicians, with more freedom to add physical expression, moved in unison to bring the piece to life, and the orchestra, although the perplexity of such a masterpiece so abruptly interrupted the performance, a chime — out of character for the orchestra, although the perplexity of such a masterpiece so abruptly interrupted the performance strengthened my appreciation for it.

I looked around to quickly realize that the fire alarm lights were flashing, and soon the entire hall, including the orchestra, sat and listened to the announcement instructing us to evacuate. Maestro Guerrero gratefully stopped the orchestra, although the perplexity of such a masterpiece so abruptly interrupted the performance, a chime — out of character for the orchestra, although the perplexity of such a masterpiece so abruptly interrupted the performance strengthened my appreciation for it.

The conductor was perhaps the most controversial yet brilliant pieces of repertoire in classical music. The Boston Symphony Orchestra made a brilliant effort at bringing the piece to life, and despite the rude interruption — or perhaps because of it — the performance strengthened my appreciation for it.
Basketball defeats Clark, Coast Guard
Karraker sets the institute record for 3-point shots in a season

Noel Hollingsworth '12 squares up against the opposition in the paint to take a shot.

By Shi Ganeshram

Last week, MIT rebounded from its first loss against WPI with two wins against Clark and Coast Guard. On Wednesday in its game against Clark, MIT benefited from its defense against the opposition, which only made 16 of 51 field goal attempts, compared to MIT's solid 26 of 49. The Engineers' defense handled was mediocre, turning over the ball 17 times.

MIT was lead by James D. Kar- raker '12 who scored 18 points, all from the arc, shooting six of nine. Noel Hollingsworth '12 also performed well, dominating the paint on both sides of the court, with six rebounds, three blocks, and five points. Matthew M. Redfield '15 had a strong presence on the court in just 30 minutes of play, with six rebounds and three blocks. MIT finished the game with a solid 64–46 win.

The Engineers played Coast Guard on Saturday, shutting the team out. MIT had a strong start, leading 10-0 after just over three minutes of play. Coast Guard recovered, cut MIT's lead to just 13 in the first half, up 14-31. MIT quickly turned the tables back in its favor, expanding the lead during the second half and running away with it, 45-31.

The Super Bowl is once again upon us, with the New England Patriots looking to redeem themselves. The Patriots will be directed towards their TV screens watching the Packers and the Steelers take one another on in Dallas. Who will win? The Tech's Sports staff weigh in, with bragging rights on the line.

New York Giants

Conventional wisdom has it that the New Eng- land Patriots will be slight favorites for Super Bowl Sunday. On most betting sites, they are being given a 55–60 percent chance of winning. In the midst of their season, the Giants can only win by three points. Both in this specific case and as a loose rule of sports in general, my advice is the same: under the table.

The better are correct in saying that the game will be the closest one of the evening, knowing that New England will win it.

The Giants offense should perform relatively well against the New England defense. The Giants already favorites to take first possession due to New England's penchant for kicking for kick off, will find a quick reward if the Pats are fool- ish enough to attempt an onside kick. —both Vicente Cruz and Hakeem Nicks will outmatch any- one the Pats can conceivably pair them with. And against zone coverage, Eli Manning will have enough time to pick and choose his opportunities, and enough skill to capitalize on the opportunities that present themselves.

On the flip side, the Giants defense has weak- nesses, but their defensive strengths are well matched to the Patriots. In the first quar- ter, expect the Patriots to try in establishing the usual sort of big passing offense that typifies their play. Osi Umenyiora, Ja- tan Tuck, and Jason Pierre-Paul will shut down that attempt. In the second quarter and on,

we'll see a lot more runs by BenJarvus Green-Ellis (even though the Engineers shut down 3 yards per carry in the AFC Championship), and three- step drops, particularly to Robert Gronkowski (the best tight end this team has had in a long time). In fact, you want to know where New England will run the game, look forSan Francisco shows an above average Guok of the car. If they come up with no answer, expect a tidy New England to make mistakes in the fourth and coasting to the win. The Engineers' ball with the passing attack that features the quickness of Wes Welker and the physical nature of tight end Rob Gronkowski, and the result is a recipe for disaster.

On defense, the Patriots will need to focus on edge rushers, a unit that features Chandler Jones and Nicks. You're likely to see a lot more runs by BenJarvus Green-Ellis (even though the Giants have harassed them to a close win. But his outstanding and consis- tency show on MIT's end, making 13 of 32 as a team. Point guard Mitchell '11, Kates '10, and Hollingsworth '12 performed with a team-high 11 points each, and two from the three-point zone.

Karraker was not as efficient as a shooter as he usually is, shooting only five of 13 from beyond the arc. His outstanding and consist- tency shooting performance throughout the season has led to him setting the institute record for most 3-point shots made during a season, currently having a total of 86-3-pointers. Earlier in the year, Kar- raker had set MIT's career record for 3-point shooting. Karraker could possibly take a spot in Division III history as one of the top 20 3-pointers of all time (3-point field goals made) — this would require him to make 85 more during this season or 123 in total. Karraker cur- rently has the highest-eightieth 3-point field goal percentage in Division III (46.3), the second highest number of 3-point field goals attempted (150), the fourth highest number of 3-point field goals made (45), and the greatest number of total 3-point field goals made this sea- son — he is definitely a force from beyond the arc.

The Engineers will next play at Wheaton College. Their next home game isn't until Feb. 8 at 6 p.m. at Bahsoon College.

By Paul Dill

The No. 9 ranked MIT Men's Volleyball team has started the season with a bang, beating the reigning national champions in the NCAA competition at the University of Nebraska and the National College of Bible College in their opening matches. The team then traveled to Rochester, N.Y. over the weekend to participate in the Nazarene College Invitational Tournament, which featured five nationally ranked teams. MIT first had a battle with Elmira College and found themselves down two games to zero before mounting a tremendous come-from-behind, winning the fifth set 16-14 and the sixth set 16-14 to win the match 3-2. Later that day, D'Youville College would be MIT's next victim, falling 3-0 in straight sets. On Monday, the team continued on to win their fourth straight game, bringing the fifth set 16-14 to win the match 3-2. With no rest, and slightly devastated after their previous day's win, the Engineers went on to win once more, taking this big way taking down No. 1 ranked Nazarene College. The match started out close, with Junior Matt P. Hornbeck '13 having a strong start, scoring 14 kills, while Thomas added 10 of his own including the match winner. Paul M. Sya '14 and Evan P. Wang '14 shared setting duties. At the end of the day, the team would have to travel to Weeki Wachee, Florida for its next opponent as the Sports Staff will be based out of Florida's sun coast, having won last year's All- Tournament Team, MIT will take off on Washington University this Saturday night at 6 p.m. in Rockwell Cage.