By Niraj R. Desai
Institute Professor Robert M. Solow was awarded the 1987 Nobel Memorial Prize in Economics on Wednesday for his contributions to the theory of economic growth.

In making the award, the Nobel committee stressed the importance of Solow's ideas that technological advancement has a greater impact on the growth of an industrial economy than either capital accumulation or increases in the labor supply.

Solow is the eighth member of the MIT faculty and the third member of the department of economics to win the Nobel Prize. His victory came only last week after Professor of Biology Stanislaus Tongues won the prize in physiology.

The other two MIT economists honored were Paul A. Samuelson, professor emeritus and the 1970 Nobel laureate, for introducing scientific analysis into economic thought, and Professor Franco Modigliani, who won the prize two years ago, primarily for his life-cycle theory of consumption and saving.

Much of the seminal work for which Solow was awarded the prize was done in the 1950s. Solow attempted to build a mathematical model describing how such factors as capital formation, labor, and technology affect production.

"It is easy to list things that might contribute to economic growth," Solow told a Wednesday morning press conference. "The problem is . . . to make a model, to understand how these things interact, and to do it in such a way that you might have a prayer of measuring it."

Prior to Solow's research, most economists believed that capital formation and labor increased economic growth, and that such things were played only a small part.

Solow found, however, that the quality of the technology that Industrials average re- strictions. The committee de- ement in the department is 940. In the average year, the Institute's last fundrais- ing his death as an apparent suicide, although the Middlesex County medical examiner is still investigating. He is survived by his Somerville home yesterday. The Somerville Police are treat- }
Homeless: "To you, we're the invisible people"

By Thomas T. Huang

Last Tuesday night on Lansdowne Street, at the norther edge of campus, a homeless man of Apache blood exploded in a drunken rage. He confronted his lover, mistakenly believing that she had betrayed him for money. In the darkness of the decrepit, abandoned house where they were staying temporarily, the couple teetered to the brink of violence. Had it been for the other street people who forced the couple apart and talked some sense into them, the argument might have ended in bloodshed.

Carlos Gonzalez, 45, had seen a lot of things like this happening over the years. He was the one who had cleaned up the room and made it his home.

"To you, we're the invisible people," Gonzalez said. "You don't think we're human beings. You don't see us."

Gonzalez truly believed that he had to make a stand now. He was going to have to fight to stay human, refusing to give up. "What is it like at the shelters for the homeless?" he had asked.

Under the cover of darkness, he was struggling against. As the October winds grew colder, harsher, he realized that he and his fellow homeless faced an uphill battle to maintain even a vestige of basic human dignity.

He reflected on how and the others had come to occupy the tents on a stretch of grass on MIT property, near the corner of Blanche and Green Streets, just beyond the candy factory. They had also granted entrance to a rundown house nearby - a residence that had been abandoned in 1979 - and had proceeded to occupy it. Had it all begun?

Last Saturday and Sunday, the Simplex Steering Committee had staged a protest called "Test City" to dramatize the need for more homes for the poor and the work, of the 21-acre MIT-owned Simplex site. When the protest ended Sunday afternoon, roughly twenty street people remained on the site, in six tents donated by indi

vidual protesters, renaming the community "Shantytown, USA."

William Cautillo, head of the SSC, had not anticipated this. With reluctance, he soon disavowed the occupation. But he had been waiting for a long time.

When the protest ended, he said, "The people treated him like a visitor. "He's playing with me."

"Just ignore it. Just ignore it," another man told the visitor. "They're playing with me."

"Hey, Jap, you think you're a policeman? Hey, Jap, why do you think you can stop me?" Gonzalez screamed quickly, with hammer in hand. He forced Mccoy out of Shantytown, showing the man through an opening in the wire fence surrounding the plot of land. The duel continued to spew out garbled threats as he walked away.

"Just ignore it. Just ignore it," another man told the visitor. "He's playing with me."

Wolf, Bear and Tomatoes

Wolf with his piercing eyes and wry frame turned to greet a visitor. A brown, ragged beard covered most of his face, which was chiseled, strong, angular. He had been a Cambridge and living for most of his 27 years in Boston, active an as an aide for the group of homeless.

"This became apparent as the visitor first approached the people who forced the couple apart and talked some sense into them, the argument might have ended in bloodshed.

"To you, we're the invisible people," Gonzalez said. "You don't think we're human beings. You don't see us."

Gonzalez truly believed that he had to make a stand now. He was going to have to fight to stay human, refusing to give up. "What is it like at the shelters for the homeless?" he had asked.

"I'm not interested in keeping this land," Gonzalez said, pointing to the tents. "This is just a demonstration project to show that the homeless can get together - to build something for ourselves."

"People could not see through the rumpled, stained clothes, the piss-stained pants, the dirty, greasy strands of hair matted against creased foreheads, the black fingernails, and the grime from the sidewalks that motilel the skin.

"At that moment, one of the street people, a man named Mccoy, abruptly grew nervous, then angry and violent. Chelmsford Street, a hansom of alasons, he began to cry. "Hey, Jap, you think you're a policeman? Hey, Jap, why do you think you can stop me?"

Wolf returned with a garden tool. "This is what Gonzalez remembered as he entered the abandoned house on Lansdowne Street late Wednesday afternoon, when the cops weren't looking, past the psycho-delic mural-like painting that graced the front door. When his father died, Wolf had out west as a youngster to become a man named Memory, at the visitor that he was very tired, exhausted. Gonzalez had it all begun?

The homeless called him "The Mouth," being that he was the great satirist, and he had a good words. He was a leader among the homeless. He was the one who had cleaned up the room and made it his home.

"For years he had lived on the streets, searching for a place to sleep, a place to eat, a place to escape - to build something for ourselves."

For years he had lived on the streets, searching for a place to sleep, a place to eat, a place to escape - to build something for ourselves."

"The rats would scurry among them. There were so many of them, and they were some of the saddest, most tragic examples of human beings he had ever seen. The rats would scurry among them. There were so many of them, and they were some of the saddest, most tragic examples of human beings he had ever seen.

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Missile strikes Kuwaiti oil platform

The Kuwaiti defense ministry said yesterday that an Iranian Silkworm missile struck a Kuwaiti oil loading platform injuring five people. This was the third attack in the past week. Earlier an American-owned ship and an American-flagged tanker had been struck.

Iran has considered Kuwait a supporter of Iraq in the Persian Gulf war and had vowed retaliation for a US attack on one of its offshore oil platforms earlier this week.

Brodsky wins Nobel in literature

Poet Joseph Brodsky was awarded the Nobel prize in literature yesterday. Brodsky, who was a former inmate of a Soviet labor camp, was informed of the announcement earlier this week. Earlier an American-owned ship and an American-flagged tanker had been struck.

Russian poetry

In addition to more people reading Russian poetry, the Islamic Jihad, the pro-Iranian group holding hostages in Lebanon warned of new attacks against US forces in the Persian Gulf. The group issued a statement claiming that thousands of suicide bombers are prepared to strike the American ships in the area. In addition the group released new photographs of American hostages Terry Anderson and French hostage Jean Paul Kauffmann. Neither looked terribly fatigued, but both appeared to strike the American ships in the area.

Bork will be taken this afternoon

Majority leader Robert Byrd announced that the vote on the Supreme Court nomination of Robert Bork will be taken this afternoon. Bork has no chance of winning Senate approval to the position.

Teamsters seek reinstatement

Thirty years after being expelled by the AFL-CIO, and facing a government takeover, the Teamsters Union wants to be reinstated into the AFL-CIO. Federation president Roy Wilkins said the application will be taken up by the AFL-CIO's executive council on Saturday. The Teamsters were expelled from the federation after leaders refused to sign a code of ethics.

Weather

Fair Weather Ahead

As the high pressure moves off to our west, a cold front system will slowly approach from our northwest and increase our clouds Saturday and Sunday. Precipitation should stay to our north and northwest and increase our clouds Saturday and Sunday. Precipitation should stay to our north and northwest.

Sports

McMahon reactivated

Jim McMahon was officially reactivated by the Chicago Bears yesterday. He has been sidelined the entire season so far because of shoulder problems. He is expected to play next week against Tampa Bay.

The Bears are most happy to get McMahon back since Chicago has won the last 23 games that McMahon has started.
Column/Thomas T. Huang

On the students we have lost

MIT: listen to me for just a minute.
I remember returning from study to my room on the evening of November 10, 1983, and hearing that a resident had committed suicide. I saw the notice: "A student has apparently jumped off the sixth floor of Student Dining Hall."

I didn't know him very well. When he fell, the first impression was that he could probably cut me in two with a knee chop, but he turned out to be quite a gentle, quiet person. He was a young, athletic black man who liked writing. Sometimes he would wear something that looked like an American football uniform, and he always carried the latest copy of The Tech, the student newspaper. Once in graduate school? Once in graduate school? "Are you really here?" He asked me. "You're a freshman?" He seemed to me that freshmen were always struggling, always having to learn to make their way. He had a karate chop, but he turned out to be quite a gentle person.

But MIT: Were you and I then at the crossroads. They are facing immense pressures. Seniors, and graduate students—should not the students themselves—should not face the misguided view that the system is working? freshmen year jolted me with a sense of the ones who were undergoing destruction?

Some students travel, and others stay in residence halls. Upperclassmen and graduate students face these changes. If they can't see the future, they may feel trapped. Everyone is afraid of the end of the road. Perhaps a loved one has abruptly left their lives. Perhaps a career they thought was solid has suddenly vanished. Perhaps a door that they were counting on just don't have the experience of years that tell you there are many, many doors in a life.

MIT: I'm warning you that the number of suicides in the past year ought not to be treated as some "natural" thing. I'm warning you that these three suicides ought not be considered as isolated, pathological cases of mentally unstable student. For casual statements like these are signs that the fact that some students do get lost and confused in the MIT—denials of the responsibility we as a community must take in looking after them. M.T.: You leave very little room for failure to self-doubt or exhuastion. Possibly this confinement is brought by the students, but you do little to steer us as away from the misguided view that life is a golden forever.

MIT: You seem to expect students to be supermen and superwomen. We are freshmen, sophomores, juniors, seniors, and graduate students are simply young men and women who are still growing up, who are learning about what the hell is going on. You should help us out, I think, is what you expect us to do.

Yes, you and I, "we all buy, and we all have our own problems, and with every day it gets harder to listen to each other, and who can really be a student when you're on the verge of self-destruction?"

But MIT: Were you and I then still too busy to grive for the students who were victims of a growing academic to the degree that you can no longer listen to the noise in the background, and go on with our lives as if nothing has changed?

On Saturday, Oct. 3, 1987, Ran- di Dwyer '91 and I met Jonathan Richmond G. It was about 11:45 p.m. The next day we left MIT. They were about to leave their life. They had two more college years to go. Will they be able to get that job? Will they be able to get that graduate school? Once in graduate school, in what will they be able to turn their qualifying examination?

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Vol. 110 No. 43 Friday, October 23, 1987

Opinion

Column/Julian West

Arias deserves Nobel Prize

The awarding of the Nobel Peace Prize to the former President of Costa Rica, Oscar Arias, is a truly meaningful event. The prize is not only a recognition of the efforts of one individual, but also a symbol of hope for the future of peace in Latin America and the world.

Arias has dedicated his life to the pursuit of peace, and has worked tirelessly to bring an end to conflicts and violence in his region. His commitment to peace has been exhibited through his negotiations with various political leaders, his mediation efforts, and his work with international organizations.

Arias has been a strong advocate for human rights and social justice, and has consistently fought against corruption and abuse of power. His leadership has been an inspiration to many people, and his legacy will continue to be felt for generations to come.

In giving the Nobel Peace Prize to Arias, the Nobel Committee has chosen to honor an individual who has made a significant contribution to the cause of peace. Arias's efforts have demonstrated that peace is possible, even in the face of great adversity.

The Nobel Peace Prize is a symbol of hope, and a reminder that we must continue to work towards a world free of conflict and violence. Arias's work serves as a testament to the power of diplomacy and the importance of promoting peace and stability.

The award of the Nobel Peace Prize to Arias is a fitting tribute to his dedication to peace and his commitment to the betterment of the world. It is a reminder of the potential for individuals to make a difference, and of the importance of working together to create a more peaceful and just society.

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Student argues for being unproductive in IAP

It all started freshman year. I walked into my dorm room. The year was already a week and a half old, and I had frizzled away the past ten days "Shopping" on Manhattan and playing football on Long Island. I plopped down and glanced through the IAP calendar. 

When thinking I passed over the seminar on NMR (Nuclear Magnetic Resonance) (for those still naive as I was), I stopped short and realized I had perhaps been even vaguer interesting. I started the nuclear magnetic resonance seminar that day.

Then I was locked in an all-right cement canyon leading to a man dressed in steel shoes with thick walls.

The next year I was no better. Thankfully, I decided that I would earn some money during IAP. My productivity did not decrease any squashed time working at a restaurant.

Please, Dean MacVicar and Professor D. G. Wilson, for my sins. Remember that I am just a simple "type-A" MIT student. I just cannot be trusted to be productive without someone holding my hand.

Joseph Lichy '89

Column/Michael J. Garrison

IAP journal writer complains

I admit it. I was one of those ten juniors last year who filled out a journal for the Independent Activities Period Policy Committee. I was a single student-sponsored IAP activity. But then the Institute wasn't sponsoring the fair: other 2000 miles of where I was staying. I spent the entirety of IAP in January at home, in Bethel, VT. Did I slack off? Did I spend my IAP in an unproductive manner? There are two different questions, right? The IAP Policy Committee apparently doesn't think so ("MIT considers IAP changes," Oct. 20).

When I was asked to keep this journal I called the IAP office and asked if they wanted me to keep it even though I wouldn't be here over IAP. They said they did and that I would be paid $25 upon completion of the journal. I was supposed to write about everything I did. So I did. Not about my rainy reunions with my grandmothers (I missed her birthday who was also skipping IAP in her grandm other's year), not about my snowboarding with my father, and showing my girlfriend (who was also skipping IAP in order to work in Philadelphia) around Boston.

I suppose all of these are "non-productive" activities, but I was very thankful to have the chance to do them. Other students seem to agree with me. The story we ran on Tuesday has drawn the most mail of any single story ever. Many of those letters were a against a Mand for "rest and recreation." IAP. Of course, I assumed they were trying to tell me what students felt they needed. Instead, it always seems like they were checking us up so we could make sure we were doing our home-work.

Beides, I don't think I ever got that $25.

Michael J. Garrison, a senior in the department of aeronautics and astronautics, is publisher of the Tech.

Feedback:

IAP rounds out an MIT education

It's 2 a.m. I'm still wide awake after having drunk only one cup of coffee all day. I'm in pretty good shape. Just having finished a job application for next summer, I begin reading The Tech to make a break before starting my next problem set. What do you sell, Members of the Independent Activities Period Policy Committee believe that students spend IAP in unproductive ways ("MIT considers IAP changes," Oct. 20). What are those "unproductive" activities? According to the committee, they are reading novels, watching movies, and socializing with friends. It seems that MIT students, used to being told what to do during the semester, just lay around and let their brains waste too much because they have no deadlines to meet.

For one, do not consider reading novels and socializing "unproductive." People sometimes find such activities educational, especially because I don't have the time during the semester to do them to any significant extent. During the term, I must complete problem sets, study for tests, write papers, etc., in much time to just sit back, relax, and read a few popular novels like Heart of Darkness or Great Expectations.

MIT is supposedly making an effort to give its students a well-rounded education. Talk of curricular reform is heard every year if there are plans to turn IAP into a structured, one-month mini-term. The statement that "MIT may have actually increased the pace and pressure of the shortened term that remains," in many, is on very sound reasoning. As MIT students, I wish I could make the students work their assets off during the semester; but to add what is missing (this semester), they are reading novels and socializing? I wish I had more time to socialize! I really don't see how these and other activities can be labeled as unproductive.

If people say they are bored, what is the fault for sitting around and doing nothing? I think we should enjoy how they spend - or waste - their time over IAP. If people are reading novels and watching TV, we should keep it. What harm is there in socializing? I wish I had more time to socialize! I really don't see how these and other activities can be labeled as unproductive.

Let's just look at what IAP means. IAP is Independent Activities Period. It is not independent. To students in which we are the students to which we have spoken enjoy how they spend - or waste - their time over IAP. If people are reading novels and watching TV, we should keep it. What harm is there in socializing? I wish I had more time to socialize! I really don't see how these and other activities can be labeled as unproductive.

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IAP should not be “spring training”

To the Editor:

Since Davis for Undergraduate
Education Margaret L. A. Mac-
Vicar '63 et al. are so concerned
about MIT students using their
time “inappropriately” during IAP
(“MIT considers IAP chang-
"I'd like to suggest
one possibility for giving us more
work to do."

As MacVicar points out, “rest
and relaxation really wins the
boat as to what IAP is all about.” I think
that each department ought to offer its
training and demanding classes
during this interval, and make
registration mandatory. This
would serve as sort of a “spring training”
for the upcoming term and
would insure that students wouldn’t be
distracted by waste-
ful activity like reading or so-
cializing and instead jump right
into an 18-hour workday.

With only three and a half
weeks to cover an entire semes-
ter’s material, the pace would be
aggressive, but no doubt reward-
ning. IAP would serve as a fantas-
tic opportunity for professors to
eliminate the deadwood in their
classes as they put their students
in the ultimate test of their intel-
llectual caliber and physical en-
durance — five all-nighters in a
two week period.

This sort of thing would appeal
with complete name, address, and
to those students with a monoch-
omatic streak, giving them a new
thrill as they plunged headlong
into an endless sequence of prob-
lem sets, tests, papers and final
projects coming one right after
another with machine-gun like
rapidity.

Lecturers would probably have
to be cancelled in extra-
challenging courses like Unified
Engineering (14.001) and Inter-
dustry Digital Systems Labora-
tory (6.111) so that students
would have enough time to do
the homework. Rest and relax-
ation — who needs it?

Such an ambitious program
would no doubt be criticized by
those weak of will and mind. No
wonder, because it’s this sort of
riffraff who squander the Institu-
to’s precious resources lounging
around during IAP while they
should be hard at work. MacVi-
car was right to question MIT’s
pursing its January maintenance
bill — why don’t we just let the
slackers freeze? Better yet, let’s
just root them out of the Insti-
tute and make IAP a productive
time for everyone who’s left.

Rick Osgood '99

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weeks to cover an entire semes-
ter’s material, the pace would be
aggressive, but no doubt reward-
ning. IAP would serve as a fantas-
tic opportunity for professors to
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classes as they put their students

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Homeless to stay at Simplex

To the Editor:

The mood in Tent City today was friendly, optimistic, and defiant. The small but dedicated crowd pressed MIT's plans for the Simplex Site and the plight of the homeless in general, in a diverse group. It includes an outreach student known as "the doctor," a couple who call themselves Princes and the Bear, and Carlos Gonzalez who is currently running for a seat on the Cambridge City Council.

The common thread that has pulled them all together this weekend and still holds them together is that the City of Cambridge, and the entire United States that the homeless are a force to be reckoned with. After living on the streets for years, he hopes to force the country to realize that beneath the ratty clothes and sometime strangely hairy, they are people too, in fact they are US citizens who deserve the right to life, liberty, and property, like the rest of us. All expressed their determination to control their own destiny, and direct their own lives. None enjoy the dependency that is forced upon them.

Regardless of their ultimate goals, the protesters are united in the ratty clothes and sometime months pregnant.

Steve Fernandez '88

AN OPEN LETTER TO ALL STUDENTS ENROLLED IN COURSE # 6.001, 6.003, 6.170, 6.801

There are four books purchased/marketed jointly by McGraw-Hill and the M.I.T. Press. Under their agreement books used for classroom can only be bought from McGraw-Hill while small quantities purchased as references can be purchased from the M.I.T. Press. M.I.T. Student Directors noted that retail prices set by McGraw-Hill were higher than the retail set by the M.I.T. Press. The four books and the differences in retail price are as follows:

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<th>AUTHOR</th>
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<td>(1) Abelson</td>
<td>Structure and Interpretation of Computer Programs</td>
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<td>(2) Horn</td>
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<td>(3) Liskov</td>
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<td>(4) Siebert</td>
<td>Circuits, Signals and Systems</td>
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Because of the agreement by the two publishers, the M.I.T. Press could not supply the books to the M.I.T. Coop at the lower retail prices. The Coop continues to work with both publishers to resolve the problem.

The price differentials were discussed with Coop management, and it was agreed that the Coop would credit or refund the price differential to any M.I.T. student who purchased any of the four books. Credit or refund would be made upon presentation of a sales receipt or other proof of purchase. Students interested in obtaining credit or refund should do so at the Book Services Desk at the M.I.T. Coop at Kendall by October 31, 1987.

Your Coop Directors,
Christine Chu '88
Mark Phillips Sloan '88
Darian Hendricks '89
Rebecca Tong Sloan '88
Julie Kim '90
Leaders of oppressed deserve prize

To the Editor:

Once again, columnist K.J. Saeger has managed to insult several groups with a single stroke of his pen ["Peace prize reward for evil," Oct. 20]. His remark about previous recipients of the Nobel Peace Prize who "accomplished nothing," Bishop Desmond Tutu and Lech Walesa in particular, was an affront to those of us who happen to believe that it is worth struggling against oppression, no matter what the odds are.

Walesa, along with slain priest Jerzy Popieluszko, united the Polish people in their struggle against their government. This was no small accomplishment, considering the myriad of factors which weighed against them. But I guess Saeger is right — after all, Poland is still a satellite of the Soviet Union, the people are still lining up for hours in food lines, and martial law can be imposed at any time. Not even a glimmer of accomplishment, according to Saeger.

Wrong. After the banning of Solidarity in December 1981, the people struggling against the communist regime did not just say "Well, it's been fun fighting with you, see you in the bread line." The movement went underground, and the illegality of their actions did not (and still doesn't) even come into consideration as they distribute "anti-social" literature, such as texts of Father Popieluszko's homilies, almost illegible because the carbon paper between the fourth and fifth pages is so clear from overextendeduther..." The movement went underground, and the illegality of their actions did not (and still doesn't) even come into consideration as they distribute "anti-social" literature, such as texts of Father Popieluszko's homilies, almost illegible because the carbon paper between the fourth and fifth pages is so clear from overextended

The spirit of oppressed people cannot be broken under the tyranny of martial law, or apartheid, or war; if Lech Walesa, who personified the Solidarity movement, is not deserving of the Nobel Peace Prize, then who is? Perhaps Ronald Reagan, for being a terrorist who "accomplished nothing," in the sense that he fought for what he knows is right.

The spirit of oppressed people cannot be broken under the tyranny of martial law, or apartheid, or war; if Lech Walesa, who personified the Solidarity movement, is not deserving of the Nobel Peace Prize, then who is? Perhaps Ronald Reagan, for being a terrorist who "accomplished nothing," in the sense that he fought for what he knows is right.

Alek Grabinski '88

Homeless take stand against displacement

To the Editor:

"Test city" was a protest held by Cambridgeport residents against the expansion of MIT into community land ["Simple protest seeks more housing," Oct. 26]. The residents of Cambridgeport united their personal activities into the movement on the morning of Sunday, Oct. 18.

After this, a group of homeless people who call themselves "the council of the homeless" remained on the land in order to build and reconstruct houses. Some houses are already under construction.

To get MIT students to use their talents to actively combat the displacement of the homeless, and to rally support for action in the city government.

"To empower themselves. This was an effort to have solidarity among themselves and with other homeless people around the city, and to draw upon their skills and talents.

Ron Francis '87

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ISRAEL WEEK in CELEBRATION OF ISRAEL'S 20TH YEAR

OCTOBER 29 - 29, 1987
M.I.T.

AN ISRAEL UPDATE
Friday, October 23 5:30 p.m. Andrews House Dining Room
with Israel Career General Arthur Seven

SCIENCE & TECHNOLOGY IN ISRAEL
Monday, October 26 7:00 p.m. Crowley Auditorium
with Dr. Naftali Sorkin, Dean of the Weizmann Institute of Science

CARAVAN & STUDY IN ISRAEL
Monday, October 26 4:45 p.m. Room 8-119
with Yair Brown, MIT student

ISRAEL PAM
Tuesday, October 27 11:00 a.m. - 2:00 p.m., Lobby 7

ISRAELI DANCE NIGHT
Wednesday, October 28 7:30 p.m., Sanders Theater
Sponsored by M.I.T. Dance Club

ISRAELI CHIC
Thursday, October 29 5:30 p.m., M.I.T. kosher Kitchen (Rm 5-007)
E77g. hairstyle or cap.

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First Boston, a special bracket investment banking firm, headquartered in New York, will be recruiting for its financial analyst program. Positions are available in the Investment Banking, Corporate Finance, Mergers and Acquisitions, Real Estate and Mortgage Finance Departments. All Seniors are cordially invited to attend a presentation and informational reception.

Presentation/Reception:
Thursday, November 5, 1987
Room 8-105
7:00 P.M.

Interviewing schedule:
Friday, January 29, 1988
Office of Career Services

For further information and inquiries, please feel free to contact:
Lars C. Bespokla
Analyyst
(212) 909-2641

The First Boston Corporation
Park Avenue Plaza
New York, N.Y. 10016
ANDRE WATTS
Works of Mozart, Schubert, and Brahms.
Symphony Hall, October 18.

WATTS IS POWER.
From the opening phrase of his recital of works by
Haydn, Mozart, Schubert and Brahms, Andre Watts grabbed the au-
dience's attention. The pianist who began his musical career playing
Liszt's Piano Concerto in E-flat with the New York Phil-
harmonic under Leonard Bernstein at age 16, showed the Boston crowd that his
youthful energy was, if anything, magnified at age 40.

He began with Haydn's Sonata no. 38 in C, Hob. XVI/40. Its opening Andante con
espressione was serene. Slow and express-
ive, Watts soothed his instrument into re-
sonance of absolute grace. His fingers
alone appeared to move. Head poised
over his keyboard, Watts delivered each note
with care. Next, came a crisp, vibrant
Rondo. His mouth silently echoed the
tunes as the hands played, feverously
moving in harmony with his piano. His
hands could be seen gliding off the key-
bord at the end of certain phrases, as if to
help shape tonal textures.

Up and down stepped his head, rein-
serting the musical punctuation. Watts
left the audience eager for more as he
walked off the stage.

Mozart's Sonata in F Major, K. 332 was
next in line for Watts' enlightened inter-
pretation. The Allegro, with a lively al-
berti bass — was gay and gently. The
mellow Adagio inspired peaceful reflec-
tion.
The final, magical, Allegro drew
smiles from the audience. His technique,
sharp and assertive here, exemplified rare
energy and intensity.

Franz Schubert's Sonata in A minor,
Opus 143, D. 784 was third on the pro-
gram. Beginning forcefully, yet elegantly,
Watts gradually created a furious whirl-
wind in the final Allegro vivace. The piano
was driven so intensely that he was later
compelled to wipe the perspiration from
the keys.

Lowenstein challenges American audiences
in the late 1970s. That film worked so well
in its heyday. Watts left the audience eager for
more as he walked off the stage.

The Tech Performing Arts Series presents...
SINFONOVA
Mostly Bach
Sinfonova is a chamber orchestra of extraordinary talent
and versatility. Their first concert of the season will include
both Bach's Concerto for two violins in D minor,
BWV 1043 and the Concerto for two keyboards in C,
BWV 1061. The beautiful Bachianas Brasilieras No. 9 is
also on offer. Hear Sinfonova once and you'll want to go
to the whole season. Jordan Hall, October 31, 8pm.
MIT prices: $13.50 tickets for $6; $8.50 tickets for $4.

Tickets are on sale at the Technology Community Association,
W20-450 in the Student Center. Office hours posted on the door.
Call x-4885 for further information.

The Tech Performing Arts Series, a service for the entire MIT
community, from The Tech, MIT's student newspaper, in
conjunction with the Technology Community
Association, MIT's student community service organization.

FROM THE CREATORS OF 'A ROOM WITH A VIEW'

What in the World is Going On?

Talks by MIT Faculty
Friday, October 21, 1987

MIT celebrates the beginning of the five-year Campaign for the
future with a series of informal presentations
for the entire MIT community and the National Alumni Conference.

Edgerton Hall
Room 36-07
President Paul E. Gray
Moderator

2:00 PM
Building to Atonal: Automated Precision Manufacturing
Alexander H. Shaw
Department of Civil Engineering

3:00 PM
Organizational Structure & Artificial Intelligence
Thomas W. Malone
School of Management

4:00 PM
The Superconductor Revolution
David A. Radzine
Department of Materials Science and Engineering

Huntington Hall
Room 10-75
President Paul E. Gray
Moderator

2:00 PM
An Historian's Perspective on the Middle East
Philip S. Khoury
School of Humanities and Social Sciences

3:00 PM
Biotechnology: The New Frontier
David L. Chiang
Biotechnology Project Engineering Center

4:00 PM
Changing Patterns of Research and Development in Japan
D. Elleman Wistar
School of Management

Kresge Auditorium

2:00 PM
Chemistry: Molecules That Matter
Mark S. Wrighton
Department of Chemistry

3:00 PM
City Marketplaces: Remaking to Rebuild Downtown
Bernard J. Fraden
Department of Urban Studies and Planning

4:00 PM
Attention for a Nation's Future: A New Agenda for the Undergraduate Program
Margaret L. MacVicar
Dean of Undergraduate Education

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The Tech Performing Arts Series, a service for the entire MIT
community, from The Tech, MIT's student newspaper, in
conjunction with the Technology Community
Association, MIT's student community service organization.
Shakespeare Ensemble — peeling away masks of sanity

(Continued from page 10)

tickets for a David Bowie concert. A car...
The Tech Performing Arts Series presents...

**ORFEO**
Boston Camerata performs Monteverdi opera
Jon Humphrey sings the title role in this concert version of Monteverdi's *Orfeo*. Jordan Hall, October 23, 8pm.  
MIT price: $5

**PRO ARTE**
MIT's Gloria Raymond to sing...  
Mezzo-soprano Gloria Raymond will sing Mahler's *Kindertotenlieder* with the Pro Arte Chamber Orchestra, conducted by David Roose.  
A world premiere by Steven Mackey is also on the program, as is Haydn's Symphony No. 86. Wonderful music; home-grown talent. Sanders Theatre. October 25, 3pm.  
MIT price: $12 tickets reduced to $6.

**HALLOWE'EN!**
Boston Musica Viva goes wild for this weird and wonderful event. To include H. K. Gruber's *Dracula's Haus - und Hofmusik*.  
The Chinese Children's Palace of Hangzhou is a group of delicate Chinese classical music and ancient Chinese folk dance. Symphony Hall, October 28, 8pm.  
MIT price: $3

**CHINESE PALACE**
The Chinese Children's Palace of Hangzhou is a group of dancers, singers, musicians, and acrobats making their premiere US appearances. The performance weaves delicate Chinese classical music and ancient Chinese folk dance. Symphony Hall, October 28, 8pm.  
MIT price: $3

**ALEJANDRO RIVERA**
Chilean guitarist Alejandro Rivera and "New Directions in Latin American Music" will perform original compositions by Rivera, as well as music from Argentina, Chile, Venezuela, Brazil, Peru, Ecuador and Puerto Rico.  
Kresge Auditorium, MIT, November 1, 8pm.  
MIT price (in advance only): $8.

**COLLAGE**
This is going to be intriguing... Collage is presenting the world premiere of "*Cymbeline* after Shakespeare", by Charles Fussell, conducted by the composer and featuring Jack Larson (who played Jimmy Olsen in the original *Superman* series) as narrator, with tenor David Gordon. Shakespeare with a difference in Sanders Theatre. November 2, 8pm.  
MIT price: $4.

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Tuesday, November 3— *Film and Information Session in Room 8-205*  
*Information Booth in the Student Center Lobby 13 2nd floor from 10-2:00 p.m.*

Tuesday, November 10— *Interviews from 9-1:30 p.m. in the Office of Career Services*  

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Room 4-149

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Over 10 percent of sophomores not science or engineering majors
One hundred and nine sophomores, or about a tenth of the Class of 1988, have decided to major outside of engineering and science.

The shifting enrollment pattern is "what we set out to do," commented Director of Admissions Michael C. Behnke, adding that the trend is likely to continue.

Public relations has been responsible for much of the change, because it has increased the applicant pool and altered MIT's image as a purely technical institution, Behnke explained. The number of applicants to MIT rose by 19 percent last year. Behnke said that MIT faculty members have been informing him anxiously of changes in student interests.

The results of the fifth-week count confirm that those changes are being materialized by the majors that the student chooses. Behnke recently met with the political science faculty to discuss how they saw as a rapid rise in undergraduate interest in political science, a department traditionally dominated by graduate students. The number of sophomores declaring Course XVII (political science) jumped from 10 of 267 for the past two years to eight this year.

The political science faculty members were anxious to learn how they could serve the increasing number of undergraduate majors, Behnke said.

Stolzenbach, who this fall replaced Kenneth R. Manning as CUAFA chairman, felt the changes are the result of students changing their major outside of engineering and computer science when demand had seriously surpassed departmental resources in 1984. But this was one of the most specific duties that CUAFA has ever been given, according to Keith Stolzenbach, the new chairman of the committee.

CUAFA is responsible for more general policymaking, said Stolzenbach, who is an associate professor of civil engineering. This year, the committee is going to "look beyond the numbers" to get a feeling about the impact of the admissions priorities which CUAFA had set. In the past, the committee had looked predominantly at students' MIT grades to get an idea of the effectiveness of admissions policies. This year, CUAFA is reviewing faculty and deans to get a more personal appraisal of the kind of students that have been admitted and the experience they are having, Stolzenbach said.

He added that CUAFA will also try to have some input in setting next year's self-help level based on its experience with the impact of financial aid obligations on the quality of life. The decision is ordinarily made by the President and the Academic Council.

CUAFA: Past and future
By Ben Z. Stanger
The Committee on Undergraduate Admissions and Financial Aid was formed to monitor enrollment in the department of electrical engineering and computer science when demand had seriously surpassed departmental resources in 1984. But this was one of the most specific duties that CUAFA has ever been given, according to Keith Stolzenbach, the new chairman of the committee.

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Write or call
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He added that CUAFA will also try to have some input in setting next year's self-help level based on its experience with the impact of financial aid obligations on the quality of life. The decision is ordinarily made by the President and the Academic Council.
Normally, on the 5-2, an officer works 3 days a week. Prior to the changeover, the officer will work Monday through Friday. On the week of the changeover, he will be forced to work Monday through Saturday, installing six days for that week. In the proposal, the union sought to have the sixth day off. Conway said. According to the proposal, the modified forward 5-2 schedule would amount to four extra days off for each officer at a cost of $16,000 per year. Under the reverse 5-2 schedule, Conway maintained that it would cost MIT $8,000 per year for the two extra days off the officer would receive. The plan would not have cost the administration "the price of a second hand car to settle the contract," Conway said. "They turned us down.

Fandel explained that the proposal was turned down because it required an unacceptable eight thousand dollar increase in police salaries.

On Sept. 28, both parties met again, though no issues were resolved. Currently, both sides have ceased meeting as negotiations have reached an impasse.

Seniority, discrimination in promotion system

There have been allegations of officers on the ineffectiveness of the current promotion policy. "It's antiquated by 20 years," explained Conway.

Under the current promotional system, Campus Police Chief James Olivieri determines promotions based on recommendations from his staff. Conway added that, "often, more qualified people get passed up.

Senior Vice President William R. Dickson '56, however, emphasized that the system was fair and that "Olivieri has served the institution in a remarkable way."

"Various factors need to be considered when looking at the qualifications of a candidate," Dickson said. However, he did not know the specific procedures the police department uses in considering promotions.

Chief Olivieri declined to comment on the matter.

Parol Officers Brent Nelson and Joe Franio have each filed grievances over the administration's promotional policy claiming that they were passed over by less qualified candidates who lacked seniority.

Dickson reiterated that various aspects must be considered in determining promotion and that seniority alone is not a determining factor.

"Every other department has a modern promotional system, which includes definitive ways to determine a candidate's qualifications for promotion," Conway said. He added that MIT's promotional system is based on word of mouth.

There were allegations during the summer by Feminists Ted Lewis of discrimination and racism in the promotional system. Fandel emphasized that the allegations "have no credentials."

Dickson commented that if there were any over problems in the promotional system such as unfairness or discrimination, action would have been taken to change the system.

Conway said that both cases will go before arbitration on Oct. 27. The action will be mediated by the American Arbitration Association.

Other settlements discussed

On June 22, Fandel had proposed to the union a reverse schedule. This plan calls for an adjustment to the 5-2 work schedule where officers would shift their days off backward, rather than forward as it does under the current schedule.

For instance, an officer who has Saturday and Sunday off would shift back one day and have Fri- day and Saturday off. This would cycle such that in seven weeks time, the officer would have Sat- urday and Sunday off again.

Conway and the Association, however, turned down the reverse schedule proposal.

The Campus Police Association presented a proposal to MIT on Sep. 11 for a new work schedule which Conway believed could have settled a contract at a reasonable cost. The proposal was rejected by MIT as too ex- pense, Fandel said.

Conway had proposed a modi- fication to the current 5-2 sched- ule that would work in the fol- lowing way:

On the first week an officer's days off fall on Sunday and Saturday, after two months, he would have Monday and Sunday off.

Normally, on the 5-2, an officer works 3 days a week. Prior to the changeover, the officer will work Monday through Friday. On the week of the changeover, he will be forced to work Monday through Saturday, installing six days for that week. In the proposal, the union sought to have the sixth day off. Conway said. According to the proposal, the modified forward 5-2 schedule would amount to four extra days off for each officer at a cost of $16,000 per year. Under the re- verse 5-2 schedule, Conway main- tained that it would cost MIT $8,000 per year for the two extra days off the officer would receive. The plan would not have cost the administration "the price of a second hand car to settle the contract," Conway said. "They turned us down.

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Under the current promotional system, Campus Police Chief James Olivieri determines promotions based on recommendations from his staff. Conway added that, "often, more qualified people get passed up.

Senior Vice President William R. Dickson '56, however, emphasized that the system was fair and that "Olivieri has served the institution in a remarkable way."

"Various factors need to be considered when looking at the qualifications of a candidate," Dickson said. However, he did not know the specific procedures the police department uses in considering promotions.

Chief Olivieri declined to comment on the matter.

Parol Officers Brent Nelson and Joe Franio have each filed grievances over the administration's promotional policy claiming that they were passed over by less qualified candidates who lacked seniority.

Dickson reiterated that various aspects must be considered in determining promotion and that seniority alone is not a determining factor.

"Every other department has a modern promotional system, which includes definitive ways to determine a candidate's qualifications for promotion," Conway said. He added that MIT's promotional system is based on word of mouth.

There were allegations during the summer by Feminists Ted Lewis of discrimination and racism in the promotional system. Fandel emphasized that the allegations "have no credentials."

Dickson commented that if there were any over problems in the promotional system such as unfairness or discrimination, action would have been taken to change the system.

Conway said that both cases will go before arbitration on Oct. 27. The action will be mediated by the American Arbitration Association.

Other settlements discussed

On June 22, Fandel had proposed to the union a reverse schedule. This plan calls for an adjustment to the 5-2 work schedule where officers would shift their days off backward, rather than forward as it does under the current schedule.

For instance, an officer who has Saturday and Sunday off would shift back one day and have Fri- day and Saturday off. This would cycle such that in seven weeks time, the officer would have Sat- urday and Sunday off again.

Conway and the Association, however, turned down the reverse schedule proposal.

The Campus Police Association presented a proposal to MIT on Sep. 11 for a new work schedule which Conway believed could have settled a contract at a reasonable cost. The proposal was rejected by MIT as too ex- ense, Fandel said.

Conway had proposed a modi- fication to the current 5-2 sched- ule that would work in the fol- lowing way:

On the first week an officer's days off fall on Sunday and Saturday, after two months, he would have Monday and Sunday off.

Normally, on the 5-2, an officer works 3 days a week. Prior to the changeover, the officer will work Monday through Friday. On the week of the changeover, he will be forced to work Monday through Saturday, installing six days for that week. In the proposal, the union sought to have the sixth day off. Conway said. According to the proposal, the modified forward 5-2 schedule would amount to four extra days off for each officer at a cost of $16,000 per year. Under the re- verse 5-2 schedule, Conway main- tained that it would cost MIT $8,000 per year for the two extra days off the officer would receive. The plan would not have cost the administration "the price of a second hand car to settle the contract," Conway said. "They turned us down.

Fandel explained that the proposal was turned down because it required an unacceptable eight thousand dollar increase in police salaries.

On Sept. 28, both parties met again, though no issues were resolved. Currently, both sides have ceased meeting as negotiations have reached an impasse.

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MIT officially kicks off fund drive

(Continued from page 1)

 announce the largest fundraising drive in MIT history, and one of the largest ever for any educational institution," President Paul E. Gray '54 acknowledged. But notwithstanding the stock market, "this has been a very exciting week," he said, noting the rollout of the Daedalus human-powered aircraft, the debut of a TV series hosted by Institute Professor Philip Morrison, and two Nobel prizes.

MIT's latest Nobel laureates -- Professor of Biology Susumu Tonegawa, winner for physiology or medicine, and Institute Professor Robert M. Solow, winner for economic science -- spoke later in the press conference.

The $550 million campaign centers on support for faculty and students, "the foundations of MIT," Gray said. It will make possible research initiatives in important areas -- like materials, biotechnology, manufacturing, and brain science, he explained, and it will support the reform of undergraduate education to include the social contexts of science and technology. (See "Pulling up MIT's sails", page 19.)

Today, 30 years after Sputnik, science faces "skepticism over whether technological advances can be used in a socially and environmentally responsible manner," Gray observed, and MIT must respond with a "science-based liberal education" to lead the way for other schools.

The Institute's goal must be to produce "not only technological leaders but leaders of society," Provost John M. Deutch '61 agreed. "No goal of the campaign is more important than our effort to devote new resources to undergraduate education."

MIT also needs endowed funds for creative new research in a time when the federal government and other sponsors are supporting fewer and narrower projects. Deutch added. Similarly, endowed dollars must replace federal student aid, which has declined by 14 percent in constant dollars since 1980, according to Strehle.

"No institution... has been more successful than MIT at producing the research and capable graduates that are needed for technological progress," said Ray Stara '57, president of the Alumni Association. "There's not a better investment in America today than MIT and other research universities."

Tonegawa stressed the importance of basic scientific research to technological progress, citing the biotechnology industry that has arisen from recombinant DNA techniques. These techniques were invented not by industrial entrepreneurs but by scientists curious about the behavior of DNA, he said. A private company sponsors the Basel Institute of Immunology, where basic science leading to three Nobel prizes (including Tonegawa's) has been done in the 15 years since it was founded.

The chair of this country depends on economic growth that is built primarily on technology, said Solow, who won the Nobel prize for his studies of growth driven by technology. At a time when the productivity growth in the United States has slowed down dramatically since the beginning of the 1970s, "it would be the height of shortsightedness to choke off the activity that will nourish economic growth in the future," he concluded.

"But, he added, "if economic forecasting were any good, we would not be starting this campaign this week."
Economist Solow wins Nobel

(Continued from page 1)

...he is in some way the consummate economist," Friedlaender added. "His work has led the profession in the most important new directions," agreed Professor of Economics Rodger W. Dornbusch.

"An MIT product"

Solow described his initial reaction to the news of his victory as 50-50 between pleasure and bewilderment. "The pleasure is growing," he added. The 60-year-old Harvard-trained economist came to MIT in 1949. "I've spent my whole professional life at MIT...the only other full-time job I ever had was as a sergeant," he said.

"You have before you an MIT product. You're visiting my home," he told the crowd of reporters.

"MIT is always been an economics department to individuals like Solow and his longtime research partner, Samuelson. "We had the foresight to offer Paul Samuelson a job...Paul then acted as a magnet to attract [other top-rated economists]," Friedlaender explained. Samuelson joined the MIT faculty in the late 1940s.

Since then, the department has been dominated by economists of the generation of Solow, Samuelson, and others—especially Montague.

Friedlaender credits Solow with helping to introduce a new generation of economists to MIT and to the field generally. Solow served as a mentor for many of today's economists, including Friedlaender who had him as an early teacher.

Solow is a role model for all of us, Lester C. Thurow, dean of the Sloan School of Management, told the press conference.

A victory for Keynesianism

"I think that it gives the Keynesian view of the economy a new engine," Dornbusch said of Solow's victory.

Solow, who served as an advisor to the Kennedy and Johnson Administrations, has been a leader in the Keynesian school which argues that fiscal and monetary policy are effective tools in regulating the economy.

That view has come under heavy attack since Kennedy's New Frontier and Johnson's Great Society by such economists as University of Chicago Professor Milton Friedman and James Buchanan, professor at George Mason University and last year's Nobel winner. They argue that the government should not interfere in markets. The Reagan Administration has been heavily influenced by this group of economists.

Solow has been a harsh critic of the Reagan Administration.

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CUP to examine Institute science requirements

(Continued from page 1)
full participation in this program did I become a convert to the idea," Friedlaender said.

"One might question how can you justify creating a doctoral program for four students each year," said Kenneth Konstatin, professor of STS. He added, though, that competing programs at Harvard University and the University of Pennsylvania accept a similar number of students each year.

According to Perkins, establishment of doctoral programs where no prior departmental PhD program existed is quite rare at MIT. "In the four years that I've been dean, no such proposal has come forward," he said. He added that establishment of interdepartmental doctoral programs occurs much more frequently.

Professor of Anthropology and Archaeology James Howe remarked that MIT was one of a handful of schools in its field that did not have a PhD program.

"At times of competition such as this," he added, "we have been waiting for 15 years for this opportunity to teach doctoral students," Howe said.

Faculty updated on undergraduate education

Dean for Undergraduate Education Margaret L.A. MacVicar '65 presented conclusions that the Science Education Committee reached in its report in September. According to MacVicar, the committee found that the current commitment to mathematics and physics is satisfactory.

But the report cited various problems with the science distribution requirement, MacVicar said. It proposed to cut the current number of distribution subjects from 19 to 13. Finally, the report concluded that there should be a life sciences requirement. The report made no mention as to how this would be administered.

MacVicar announced that the main goals this year of the Committee on the Undergraduate Program would be to further review the science, math and laboratory requirement. A second, though equal, priority would be to examine the freshman year and determine whether it is achieving its academic goals, MacVicar said.

All these goals need to be accomplished if MIT is to preserve its policy of a general education and, above all, have personal fulfillment as the main goal of its education, MacVicar said.

Demonstrator disrupts meeting

The faculty meeting was disrupted by Carlos Gonzalez, lead

ED METZGER as Albert Einstein

THE PRACTICAL BOHEMIAN

Tuesday, November 3, 8:00 P.M. Kresge Auditorium, MIT

Tickets: $10.00 with student ID

$15.00 with MIT community ID

$3.00 general admission

Sponsored by MIT Musical Club, Cambridge Music Inc. at the door

Refreshments served at 7:30 PM

FRIDAY, OCTOBER 23, 1987
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Sports Update

Men's Cross Country loses first meet since Oct. 1983

MIT's men's cross country team lost its first meet since October 22, 1983 last weekend when it dropped a 38-22 decision to Division I University of Rhode Island. Senior Anton Briefer of Milford, N.J., covered the five mile course in 26:33 to place second in the meet. MIT's last loss in a dual or triangular meet was to Williams College. The streak had covered 25 wins.

Men's Sailing finishes second in Sloop Championships

MIT men's sailing team finished second in the New England Sloop Championships last weekend held at the Coast Guard Academy. The team also finished eighth in the Boston University Invitational. The top nine rated teams in the country, as well as 11 of the top 20 were represented in the regatta. Before the race MIT was not ranked nationally.

MIND BENDER (LT)

Will the 20th century be known by our descendants as the dark age of science? Many, many generations will be endangered by and blame us for our nuclear power plants and seams. In a few generations the USA will no longer have as many people as the world today. The World's oceans and lakes will no longer fly free of which long, long ago the oceans and lakes. The greenhouse effect will fade away. Why? Science will finally be forced into clarifying basic laws.

We will replace h with s. Since h is about bits or quanta it is anything but a basic constant. Even though it is a magnitude smaller than 1 in a constant. We got into this mess because Planck's constant was widely promulgated for 3 decades until in 1925 Uhlenbeck and Goudsmit found all electrons in all atoms spin at a or with constant angular momentum.

Unfortunately Einstein defined h from his theory of relativity. Thus, 1/2 of the wave length of light on a 100 foot channel and with the modulation of an elf on a wave channel (f) frequency. Thus 1/2CIR for the sake of the read and rule out. One CR is on a car at 55 mph behind the other. The CR behind 55 mph car gets a lower f than moving car transmits while at the same time the car ahead is receiving a higher f. This 3 is from primes e = mc² .

All science students somehow seem to learn if they see no motion no energy is required or used. This misleading concept was first proved wrong in 1820 when Oersted could only keep a compass needle pointing E with no motion by running a steady current through a conductor running N and S. Oersted's discovery is the basis for electric motors and generators. As taught W=Fs has been very misleading. A simple thought-experiment indicates we should immediately correct the above errors and oversights. A superconductor levitates a magnet. Someday it may be a room temperature superconductor. If we take a current from the superconductor will the magnet hover lower? Will we have a non-polluting gravity driven electric generator with no rubbing parts? This indicates a levitated train with superconductors on board and opposite in the tracks only requires a tiny starting current to levitate the train. When the train is not moving it can be used as a generator. (Patent Pending.) For a copy of patent 4,567,407 to harness s with standard electric components and no brushes send $2 (and a #10 SASE with 22¢ stamp on it) to John W. Ecklin, 16143K Edsall Rd., Alexandria, VA 22305.