

Early deadline

Because of the first national observance of Dr. Martin Luther King Jr.'s birthday, the Institute will be closed Monday, Jan. 20. That means the deadline for listings in next week's Tech Talk—Notices, Calendar and Ads—has been moved forward to **noon Thursday, Jan. 16.**

Also, Tech Talk will not be published January 29 because of the hiatus between IAP and the beginning of the second term. The Calendar in next week's paper will cover the period from January 22 through February 9. Remember: **early deadline.**

Wiesner talk

The National Academy of Engineering will present its third Arthur M. Bueche Award to Dr. Jerome B. Wiesner at a luncheon on Tuesday, Jan. 21, in the Bush Room.

Dr. Wiesner will receive the award in a special ceremony during a northeastern regional meeting of NAE members. Members of the faculty and administration will be among the invited guests at the meeting, at which Dr. Wiesner will give a talk.

The Bueche award recognizes achievements in statesmanship and active contributions in the fields of science and technology, public policy and the active inter-relationship of universities, government and the private sector.

Dr. Wiesner, president emeritus and Institute Professor at MIT, is being recognized for his many contributions to reduce the risks of nuclear war through his efforts on the Atmospheric Test Ban Treaty and other arms reduction initiatives, and for high-level leadership in communications systems, as well as federal and academic engineering, science and technology programs.

New T route

The MBTA has inaugurated a new bus route, Route 79, that operates between Alewife Station and Arlington Heights. Passengers of Routes 77 (Arlington Heights-Harvard) and 350 may use the new route as a means of reaching the Red Line. Because of the new route, frequency on Route 77 has been decreased.

The T also announced an additional inbound trip at 3:45pm on Route 350 (Burlington Line to Alewife).

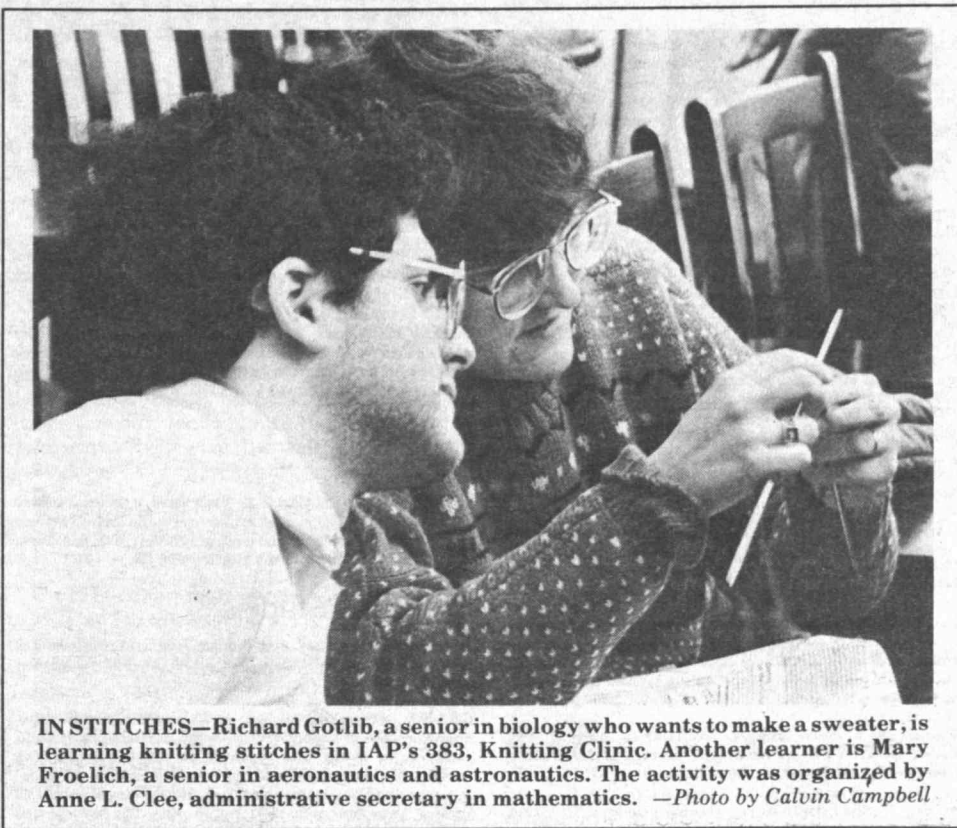
Athena Funds

The next deadline for submission of software and curriculum development proposals to Project Athena is February 1, 1986 for funding to begin in June 1986. Please call Charla Scivallo on x3-1300 for copies of the guidelines for proposals explaining the funding process.

Replies wanted

Remember the questionnaires on career development circulated to support staff members last fall? The Working Group on Support Staff issues is hoping more of you will still respond. Your input is important in recommendations the Working Group makes to the MIT administration.

If you've sent yours back, the Working Group says "thanks." If you need a new copy to fill out, you can get one at the Working Group's Open House in the Bush Room (10-105) today noon-1pm or Thursday, 1-2pm. Or you can call x3-3386 and one will be dispatched right away.



IN STITCHES—Richard Gotlib, a senior in biology who wants to make a sweater, is learning knitting stitches in IAP's 383, Knitting Clinic. Another learner is Mary Froelich, a senior in aeronautics and astronautics. The activity was organized by Anne L. Clee, administrative secretary in mathematics. —Photo by Calvin Campbell

Alumnus, project ride Columbia

The space shuttle Columbia, launched Sunday, Jan. 12, carries an MIT alumnus—the first Hispanic American to fly in space—and an experiment designed by researchers in the Department of Materials Science and Engineering at MIT.

The alumnus astronaut is Dr. Franklin R. Chang-Diaz, who received the PhD in applied plasma physics from the Department of Nuclear Engineering in 1977, the same year he became an American citizen. Dr. Chang-Diaz is a visiting scientist at the Plasma Fusion Center.

The materials experiment was developed under the direction of Professor Merton C.

Flemings, head of the Department of Materials Science and Engineering and Toyota Professor of Materials Processing, and Dr. Yuh Shiohara, research associate in the Materials Processing Center. It involves levitation melting of a nickel alloy and is designed to examine the effect of zero gravity on undercooling and solidification. Graduate students Thomas J. Piccone and Yanzhong Wu and UROP students M. Dean Dellinger and Anthony L. Owens are participating.

The New York Times profiled Dr. Chang in a "man-in-the-news" piece in the January 13 issue under the headline "A Dreamer in Space."

(continued on page 3)

New 'black hole' believed found

A dark, massive object, which occasionally bursts into x-ray brilliance and is bound gravitationally to a faint red star in the Constellation Monoceros, has been identified as a probable black hole. If it is, it would be only the third so far found.

The discovery was announced by Dr. Jeffrey E. McClintock of the Harvard-Smithsonian Center for Astrophysics and the MIT Department of Physics and Dr. Ronald A. Remillard, a research staff member at the MIT Center for Space Research, at a meeting of the American Astronomical Society January 7 in Houston.

They said the probable black hole is the nearest to Earth and the first to be linked with a dwarf star in a binary system.

Optical observations of the x-ray nova AO620-00 made over a four-year period have revealed that the x-ray eruptions are produced by a binary system in which one member is a dwarf star and the other the probable black

hole with a mass at least three times that of the sun, they said. During outburst, stellar material is drawn from the dwarf companion and falls into the gravitational well of the probable black hole, producing more energy than 10,000 suns, the announcement said.

According to current theories, a black hole is a stellar remnant formed by the explosion of a star many times the size of the sun. When the star's outer lighter elements are blown away into space, the heavier elements in the core collapse upon themselves. If the collapsing mass is greater than the limit that can be supported as a stable neutron star gravity continues to compact the material until not even light can escape its extreme gravitational field.

If the otherwise invisible black hole is part of a binary system, however, x-ray astronomers may detect its presence by observing the high-

(continued on page 3)

New telephones coming in '88

There's a new telephone system in MIT's future, but don't hold your breath. The scheduled operational date is June 11, 1988.

What is coming is a \$16 million state-of-the-art AT&T 5-ESS digital switching system which will permit, among other things, simultaneous voice and data transmission. The new system also will unite the two main existing systems—Centrex and the dormlines—as well as integrating some remote small systems, according to Morton Berlan, director of telecommunications systems.

The new system will be the first to use an Integrated Services Digital Network (ISDN) software program now being developed. The software, which will be tested late in 1986 by Illinois Bell Telephone will permit worldwide connections for voice and data.

Though the 'cutover' date for the new system seems distant, work on the installation has already begun, Mr. Berlan said. The first step is making an inventory of the telephones now in use. This is being carried out by AT&T people who are moving west to east across the

campus. In many cases existing telephones will be compatible with the new system.

Also this year work will be done on the expansion of the duct system and connecting the now-unconnected buildings. MIT will buy some of the wire it now rents from New England Telephone as well as put in new wire where necessary. Three major switches—on East, Main and West Campus—will be installed to provide for economy in distribution.

In 1987 the focus will be on what kind of equipment and service MIT people want and need. All of the existing services and some new ones will be available and people will select those they want. Later in the year new equipment will be delivered and installed so that the campus will be ready for the 1988 change.

The last major telephone change was the installation of Centrex in 1972, Mr. Berlan said. MIT will own the new system, rather than continuing to rent from New England Telephone, which should offer economy as well as improved service.

Twelfth King Celebration to begin at noon

Martin Luther King Jr.'s assassination was a turning point for many, including Dr. Shirley Ann Jackson, a research physicist at Bell Laboratories and the first black woman to receive a PhD at MIT.

Dr. Jackson will be the featured speaker at the Martin Luther King tribute today (Wednesday, Jan. 15) at 12:30pm in Kresge Auditorium.

On April 4, 1968—the day King was slain—Dr. Jackson, then an MIT senior, was visiting the University of Pennsylvania where she had been offered a fellowship for graduate study.

"But when King was killed, this totally threw me off," she remembered. She decided to remain at MIT to work at improving the environment for minorities—particularly blacks.

"Martin Luther King's death triggered guilt at the Institute and in the country," she recalled. "There was a feeling that there should be change. His death pressured many to change," she said.

Dr. Jackson and a handful of other black students—there were about 10 black American undergraduates—got together to work for change. Their chief aims were to increase the number of minorities and to eliminate the isolation many felt.

"A number of students were not friendly," she recalled. She remembered times in the women's cafeteria when people would leave the table once she sat down. Or, if she had a choice seat in the lecture hall no one would sit next to her.

The group, the forerunner to the Black Student Union, met with the administration and presented demands which included increasing the number of black students, faculty and administrators. They negotiated with a task force headed by then-Associate Provost Paul E. Gray.

"Don't think everybody was smiling, eating cheese and drinking wine. There were groups of black students who were scared to be in the process. Students were not militant then but gradually became more so," she said.

Change came slowly after several meetings. The number of minority students grew.

"That summer one Native American and five black students were immediately invited to a summer educational program for minorities called Project Epsilon, now called Project Interphase. That fall, recruiting efforts mainly

(continued from page 3)

Sherwood appointed to state hazing panel

MIT Associate Dean Robert A. Sherwood has been appointed to a six-person committee assembled by the Massachusetts Board of Regents to help implement a new state law making hazing a crime.

The law, which went into effect in November, provides jail terms and fines for perpetrators of hazing, for witnesses to acts of hazing who fail to report such incidents, and for faculty or administrators who encourage, permit or fail to report hazing.

Sherwood, section head in the Dean's office for residence and campus activities, will be one of two private college representatives on the Regent's committee. The group will promulgate regulations pertaining to the content and timing of the reporting requirement mandated by the law.

Each secondary school and each public or private school or college must file an annual report with the Regents certifying that the institution has complied with the provisions of the law.

Dean Sherwood said it should be understood that the law covers more than initiation rites in fraternities or other living groups, and can be extended to include acts by any group or organization construed as hazing. The state law defines hazing as conduct that "willfully or recklessly endangers the physical or mental health of any student or other person."

Anyone wanting to know more about the law, or who has suggestions about the implementation of its reporting requirements, can contact him at x3-4051 (Rm 7-133), Dean Sherwood said.

Seminar to focus on Kalina Cycle

A seminar on the Kalina Cycle, which many engineers and scientists consider to be a major development in steam-driven power generation, will be presented from 9 am-4pm on January 21 in Rm 9-150.

The usual steam-driven power plant vaporizes water in a boiler to produce steam. The Kalina Cycle uses a mixture of 70 per cent ammonia and 30 per cent water which results in variable temperatures during boiling. This permits the transfer of a greater amount of energy to the working fluid, which allows the system to produce more electricity from a given amount of fuel.

"The Kalina Power Cycle promises thermal efficiencies near 50 per cent without new kinds of hardware," said Dr. Myron Tribus, professor of engineering and director of the Center for Advanced Engineering Study. The Center, the Department of Mechanical Engineering, the Department of Nuclear Engineering and the MIT Energy Laboratory are sponsoring the seminar. The Kalina Cycle has been under study at MIT for two years.

The inventor of the Kalina Cycle is Dr. Alexander I. Kalina who emigrated to the United States in 1978 from Russia where he was a leading energy official. He has since worked closely on the cycle's development with Dr. Tribus, an internationally renowned thermodynamics expert, and Dr. Yehia M. El-Sayed, a research engineer at the MIT Center for Advanced Engineering Study. Dr. Kalina has also worked closely with John Eckland, president of Fayette Manufacturing Corp., an energy development company based in Tracy, Calif., and H.M. Leibowitz, who heads Fayette's Kalina program. Dr. Kalina has granted Fayette worldwide rights to the new technology.

Basketball feats

Senior Craig Pool of Exmore, Va., became the tenth player in MIT basketball history to reach the 1,000 mark in scoring when he totalled 10 points against Bates College last week.

Poole, a 6-foot forward, now has 1,001 career points. He is only one point behind Jerry Hudson '74 and 57 behind Bill Eagleson '64 who stands eighth on the all-time scoring list.

In other basketball news, junior Mike McElroy of Watsonville, Calif., recently was selected to the weekly Eastern College Athletic Conference (ECAC) Division III North honor role team.

The 6'6" center had 50 points, shot 73 per cent from the field, and had 22 rebounds in wins over Brandeis and New England College. Against Brandeis, McElroy also made 11 straight field goals including one at the buzzer in MIT's 63-62 win.

MIT will host the US Coast Guard Academy at 2pm Saturday, Jan. 18, in Rockwell Cage.

Alumnus, project ride Columbia

(continued from page 1)

The article began: "As a child in San Jose, Costa Rica, Franklin Chang-Diaz used to play inside an empty packing crate, pretending that it was a spaceship on its way to a distant star. Yesterday Dr. Chang realized part of his dream, riding into orbit aboard the shuttle Columbia as the first Hispanic American astronaut. He came to the United States in 1968 with a one-way airplane ticket, \$50 in his pocket, a suitcase, and a dream to fly in space. He had written to the rocket scientist Wernher von Braun asking advice on how to become an astronaut, and Dr. von Braun wrote back, telling the young man to come to America and study science." Dr. Chang came to Hartford, Conn., graduated from the University of Connecticut, and entered graduate school at MIT.

The MIT materials experiment aboard the shuttle is an outgrowth of several years research

Obituaries

Robert E. Baker

A funeral Mass was held December 24 for Robert E. Baker, 59, of Wakefield, a stock clerk at Lincoln Laboratory. Mr. Baker died December 22. He had worked at Lincoln since 1984.

Survivors include his widow, Lucille Albushies Baker; three sons, Robert E. Jr. and Joseph of Malden, and Brian Baker of Wakefield; four daughters, Elizabeth of California, Susan Robshaw of Wakefield, Karen Kelliher of Norton and Linda Dawson of Nashua, N.H.; two brothers and sisters, and six grandchildren.

Wilson memorial

A memorial service will be held at the MIT Chapel on Thursday, Jan. 16, at 2pm for John J. Wilson, retired life member of the MIT Corporation, former secretary of the Corporation and past president of the MIT Alumni Association. Mr. Wilson, an industrialist, prominent Boston-area trustee and well-known yachtsman, died December 31 at his home in Marblehead. Memorial contributions may be sent to the John and Dorothy Wilson Fund at Children's Hospital Medical Center, 300 Longwood Avenue, Boston.

The January 21 seminar will begin at 9am with an introduction by Dr. Tribus who will give an overview of the cycle's operation. At 10am, Dr. El-Sayed will review the status of cycle calculations made during the MIT study. At 11am, Dr. Kalina will discuss the stability of the water/ammonia mixtures and cycle variants for different applications.

At 1pm Ernest Zabolotny and Thomas A. Vivenzio of Stone and Webster Engineering Corp. will give an engineering appraisal of the cycle and discuss implications for the future of the power industry. At 2pm Mr. Leibowitz will discuss a particular application and touch on energy and economic considerations. At 3pm Dr. Arthur Cohn of the Electric Power Research Institute in Palo Alto, Calif., will discuss his institute's Kalina program. At 3:30, Dr. Tribus will present a summary.

Twelfth King Celebration to begin at noon

(continued from page 1)

by students such as Dr. Jackson, brought in even more. The number of black freshmen grew to 57.

Dr. Jackson's address today is entitled "Living the Dream." She said she will note how time is running out in South Africa but that the opportunity still exists in the United States for continued change. She will urge the audience to "believe in themselves and engage the system" to achieve equity.

"This is the legacy of Martin Luther King's dream. . . This is what he was addressing in a universal way before he died," she said.

The MIT community is invited to participate in MIT's 12th celebration of Dr. King. Participants will assemble at noon today in Lobby 7 to march to Kresge Auditorium. After Dr. Jackson's lecture, a reception will follow in the Mezzanine Lounge in the Student Center. At 4pm she will lead a workshop, "Developing and Maintaining a Positive Ethnic Identity," in the Sala de Puerto Rico.

Today's events may be held or extended into normal working hours. Joan F. Rice, director of Personnel, has asked the cooperation of supervisors in releasing employees who wish to attend the events, whenever work loads permit.

Information about the tribute can be obtained from Josephine M. Bartie or Dr. Clarence G. Williams, special assistant to the president (Rm 7-203) at x3-5446.

at MIT in which levitation-melted samples are "undercooled" below their melting point by several hundred degrees centigrade before solidification occurs. The solidification that then occurs is extremely rapid and is measured by high-speed optical sensing and cinematography. A number of potentially important engineering applications exist for the metastable and ultra-fine structures that can be obtained by such rapid solidification, Professor Flemings said.

The experiments to be conducted in space will be similar to those carried out on earth, although with less instrumentation. Samples produced in space will be examined back on earth by the MIT team and the results compared with those obtained here.

A NASA announcement says that future aircraft, autos and sporting equipment may contain alloys that are stronger and easier to form thanks to the experiment.

James A. Holbrook

James A. Holbrook, a staff member at Lincoln Laboratory since 1984, died January 4 at the age of 50. Mr. Holbrook leaves his widow, Julia, of Nashua, N.H.

Bertram Humphrey

Bertram Humphrey of Cambridge, a retired guard at Lincoln Laboratory, died December 18. He was 83 and worked at Lincoln from 1954 until his retirement in 1967.

Mr. Humphrey leaves his wife, Irene; a daughter, Ann Barrett of Concord, who also works at Lincoln Laboratory, five grandchildren and one great-grandson.

John R. Leonard

John R. Leonard, 87, of Melrose, an instrument maker at the Draper Laboratory from 1946 until his retirement in 1964, died January 1. Mr. Leonard is survived by two sons, John B. of Connecticut and Joseph R. Leonard of Florida; a daughter, Barbara J. Buonaugurio of Melrose; two sisters; 10 grandchildren and two great-grandchildren.

Alfred Richter

Word has been received of the November 9 death of Alfred Richter, 79, of Sarasota, Fla. Mr. Richter was a machinist at the Draper Laboratory from 1954 until his retirement in 1971. He leaves his widow, Frances.

Multi-media artists visit

European multi-media artists Ulay and Marina Abramovic are in residence at the List Visual Art Center's Reference Gallery in the Wiesner Building this month. Their installation, "Modus Vivendi," will be on view until February 9.

These are artists of international reputations. The Stedelijk Van Abbemuseum of Eindhoven in the Netherlands recently organized a survey of their work during the past five years and they are featured in an exhibition, "Choices: Making an Art of Everyday Life," organized by Marcia Tucker for The New Museum of Contemporary Art in New York, opening February 1.

Next Tuesday (Jan. 21) at 7pm, the artists will present a special two-hour program including slides, video, and a discussion of their integration of life and work. A reception in The Reference Gallery will follow.

Marina Abramovic, born in Belgrade, Yugoslavia, and Ulay (Uwe F. Laysiepen), born in Solingen, West Germany, have collaborated in performance, installation, photography, video and film work since 1975. They now reside in Amsterdam.

Upon their arrival in the United States, the artists worked for three days on new Polaroid photographs for their Reference Gallery installation, entitled "Tuesday/Saturday." These gigantic 80"x 40" images of rich, saturated color and shallow but crystalline focus were produced in a room-sized "camera" built by the Polaroid Corporation at the Museum of Fine Arts, Boston.

A lens was attached to the side of a 12'x16' room which contains technicians who roll and peel the large strips of film. Special masking silhouettes created by the artists were applied to the negative before exposure. Outside, the artists manipulated gestures and colored lighting to create a vivid set of seven photographs of Marina Abramovic exploring a range of inner identities felt by the artists, drawn from primal and universal connecting energies, or animism. Two color panels and an image of an anonymous onlooker complete the series.

Discussing their installation here, Dana Friis-Hansen wrote: "This Polaroid process has particular significance as a medium for the extension of their work. Sharing the immediacy of the live event and the instant return of video, this series again reveals the artists' sophisticated dexterity in focusing their energies, intellectual and spiritual, to seize the moment." Mr. Friis-Hansen is assistant curator of the Committee on the Visual Arts (CVA).



Marina and Ulay Abramovic

In addition, the artists hope to complete the third in a series of videotapes planned for all seven continents, each a response to the particularities of place and culture. The third, representing the North American continent, is being produced in cooperation with the Film/Video Section of MIT's Media Laboratory. It will be premiered at the List Visual Arts Center; call x3-4680 after February 1 for details about the screening.

The two completed works in this series are: City of Angels (1983, 20 minutes), created at the temple of Ayuta near Bangkok, Thailand, and Terra delgi dea Madre (1984, 16 minutes), produced in Sicily. While these differ in setting, tone, and structure, Mr. Friis-Hansen has described them as being meditative and authentic.

"Their previous work has focused on the layers of personal and universal energies which they explored through simple unspoken actions and situations, often involving risk, endurance and co-dependence," Mr. Friis-Hansen said.

Ulay and Marina Abramovic's residency in the Reference Gallery has been organized by the CVA and is funded by the Massachusetts Council on the Arts and Humanities.

The Reference Gallery and the List Visual Arts Center are open weekdays 10am-4pm and weekends 1-5pm.

New 'black hole' believed found

(continued from page 1)

energy radiation generated when material from its companion star pours into this gravitational trap.

For two months in 1975, the x-ray nova AO620-00 suddenly flared up by more than a millionfold to become the brightest x-ray object in the sky. At the same time, this outburst was identified with the optical brightening of a faint star.

Beginning in 1981, during a period when the x-ray source was turned off, Dr. McClintock and Dr. Remillard used an electronic camera on the McGraw-Hill 1.3-meter telescope at Kitt Peak, Arizona, to monitor the optical brightness of the AO620-00 binary system. In January 1985, spectra were taken using the 4-meter telescope of the National Optical Astronomy Observatories, also at Kitt Peak.

Secretary's Office sets staff assignments

New staff responsibilities in the Office of the Secretary of the Corporation have been announced by Constantine B. Simonides, vice president and secretary. Elizabeth J. Whittaker will be assistant secretary with responsibility for trustee relations. Nancy R. Spears will be assistant to the secretary for visiting committees.

Mr. Simonides was elected Secretary of the Corporation last fall, adding those duties to his responsibilities as vice president. He said the appointments represent a restructuring of the Office to provide for the full range of services needed by the Corporation and its visiting committees.

"Ms. Whittaker will be responsible for the management of Corporation meetings, records, communications and for all aspects of liaison and service provided daily to the 100 trustees of MIT," Mr. Simonides said. "Having served for many years in the Offices of the Chairman and the President, Betty Whittaker brings exceptional qualities to her new position. She knows MIT and she knows how to make things work."

Ms. Whittaker said she welcomes her new responsibilities and particularly the management challenges involved.

Ms. Spears will be responsible for the smooth functioning of the Corporation's 27 visiting committees. Making arrangements for 10-15 meetings each year, maintaining records, and assisting committee heads and MIT officers in appointments and communications with some 500 volunteer members of the committees is a very complex business, Mr. Simonides said.

"We look to Ms. Spears to establish a system that will eliminate surprises and simplify the

logistical aspects, while maintaining the high level of personalized attention and service that our visiting committees deserve."

Ms. Whittaker is a graduate of Wellesley College. She has been a member of the MIT staff since 1963, serving first as assistant to the director of the Summer Session and, since 1965, as administrative assistant to the President and to the Chairman of the Corporation. Since 1983 she has had the additional title of assistant secretary in connection with her duties as assistant to the Chairman.

Ms. Spears has been a member of the editorial staff of the MIT Press for the past year and before that was a teacher and part-time administrator of the Harvard School in Hollywood, Calif. She holds the BA degree in English and anthropology from Amherst College.



Ms. Whittaker



Ms. Spears

229 Basic Television Concepts
12 noon-1:30 pm, 34-101

253 Introducing German Television Geisler
12 noon-2 pm, 14N-225

890 Finding A Summer Camp For Your Child
12 noon-1 pm, 4-149

3083 Introduction To A Japanese Martial Art: Shorinji Kempo
12 noon-2 pm, dance studio

3142 Images Of The Enemy
12 noon-1 pm, West Lounge, Student Center

4661 Media Myths And Manipulations
12 noon, 37-212

4819 Adam, Eve, Izanagi, And Izanami: Creation Accounts Of The Mid East and Far East
12 noon-1 pm, 441 Student Center

4820 Vatican II: Renewal, Reform, Or Revolution?
12 noon-1 pm, 5-134

582 Central America: Developing Alternatives To Foreign Policy
Human Rights in El Salvador and Nicaragua
12 noon-2 pm, E52-321

4821 Videotape Sessions On Islamic Teachings
12:30 pm, 3-133

83 The Konchenjunga: Nepal 1985
1-2 pm, 16-310

III Laboratory Tours
1-3 pm, 66-144

402 Theory And Computational Methods For Machine Dynamics
1-2 pm, 37-186. * Preregister by Jan 10.

453 IAP Chorus
1-2:30 pm, 2-190. * Preregister by Jan 1.

563 Physics Flicks
The Relation Of Mathematics To Physics
1 pm, 6-120

568 Tour Of Haystack Observatory
1-5 pm, meet in lobby 34

625 A Brief Introduction To Management
Financial Markets And Financial Management
1-3 pm, E51-329

655 Reconstruction In Mexico City: A Workshop
1-5 pm, N52-492

802 Cuisine Japanese (How To)
1 pm, Moore Room 6-321

803 Midgetman: A New ICBM
1-2 pm, CIS Seminar Room I, E38-615

863 Voyager Encounters Uranus: The JPL Press Conferences
1-3 pm, Marlar Lounge, 37-252

3008 Latin American Experiences
1 pm, Baker Engineering Library Conference Room

3143 Domestic Violence: The Truth About Wife Battery
1-2:30 pm, West Lounge, Student Center

4150 Cogeneration At MIT?
1-2 pm, 66-144

4326 Lies, Damn Lies, And Statistics
1-2 pm, E40-153

4806 Jewish Lab
1-2 pm, W2A

(Special) The Age Of The Photon Is Upon Us
Fiberoptics
1:30 pm, 10-250

16 Robust Multivariable Control; Fault-Tolerant Systems
1:30-3:30 pm, CSDL Simulation Lab. Preregister by Jan 14 with Dr. David Burke.

477 New Radioactive Source Term Information: A Reduction In Concern For Nuclear Power Plant Accidents
1:30-4 pm, 24-115

(New) Some Main Problems Of Philosophy
What Is Truth?
2 pm, 37-212

6 Highlights Of Aeronautics And Astronautics
Testing Jet Engines: Why It Takes All The Money In The World
2-3 pm, 33-206

59 Artificial Intelligence In The Field Of Architecture
2-5 pm, 3-133

379 Real Simple Lie Algebras
2-3 pm, 26-310

564 The Program In Science And Technology For International Security
2-4 pm, 12-142

629 The Dynamics Of Social Systems
2-5 pm, E51-136

4207 Technology And Science Journalism: Toward Definitions
2-4 pm, E51-125

4208 Controversy In Cambridge: Video Documentation Of Laboratory Safety Disputes
2-4:30 pm, E15-054B

4459 Tooling At Tech: An Interactive Computer Game
2-4 pm, 66-080

4708 Magic For Beginners
2-3 pm, W2A

(Special) The Age Of The Photon Is Upon Us
Lasers And Atomic Physics
2:15 pm, 10-250

(New) MIT And Military Research From World War II To Vietnam: A Scientific Arsenal Of Democracy
3-4:30 pm, 8-105

10 Seminar Series On The History Of Aeronautics
3-5 pm, 33-319

152 Seminar Series On Arctic Offshore Engineering
Ice Forces On Arctic Structures: Part I
3-4:30 pm, 1-350

227 Plex
3-5 pm, 34-401A

285 Social Conflict: Ten Historians View Its Causes And Nature
The Revolution Of 1905 In Russia
3-4:30 pm, 2-190

356 Laser Engineering: From Crystal Growth To Laser
3-4 pm, 13-3101

750 Delivering True Artificial Intelligence
3-4 pm, 4-163

(Special) The Age Of The Photon Is Upon Us
Light And Chemistry
3:15 pm, 10-250

4709 Magic: Intermediate-Advanced
3:15-4:30 pm, W2A.

(New) Spanish Tertulia
3:30-5:30 pm, McCormick country kitchen

202 Modigliani On Economics
3:30-5 pm, E51-329

4712 Dance Workshop Guest Instructor Series
3:30-5 pm, Walker 201

(New) The Retirement Of Speaker Of The House Tip O'Neil And How It Affects The Educational Community
3:30-4:30 pm, Bush Room

(Special) The Age Of The Photon Is Upon Us
Lasers In Medical Diagnosis And Therapy
4 pm, 10-250

3 Private Pilot Ground School: Airplane And Glider
4-6 pm, 33-419*

4 Instrument Pilot Ground School
4-6 pm, 33-418*

4101 Student Workshops In Operations Research
4-5 pm, E40-298

4425 The New Scholarship On Women: The Impact On Five Disciplines
History
4-5 pm, Humanities Library

4853 Nanotechnology Lecture Series
Super Materials
4-5 pm, West Lounge, Student Center

582 Central America: Developing Alternatives To US Foreign Policy
Turmoil And Flight: Central American Refugees And The U.S. Sanctuary Movement
4:30-6 pm, 4-270*

(Special) The Age Of The Photon Is Upon Us
Laser Light Shows (with demonstrations)
4:45 pm, 10-250

4754 Winter School
6-10 pm, 407 Student Center; optional weekend trips.* Preregister by Dec 31.

(New) Science Action Coordinating Committee Revival
6-8 pm, 4-249

25 Ancient Egyptian Technology
6:30 pm, Museum of Fine Arts*

(New) Ultimate Frisbee
7-10 pm, New Athletic Center, second floor

56 Phenomena: In Search Of Chinese Art Form
The First Empire Of China: A Problem In Visual Data Base Design
7-9 pm, Edgerton Lecture Hall, 34-101

458 Films About Music
Opera
7 pm, 66-110

726 Getting The Job You Want In Industry: A Women's Guerrilla Guide To The Pin-Striped World
7-9:30 pm, 10-105*

3001 The Chemical Information Maze: How To Beat It
The Mazebuster: Computerized Chemical Information
7-8 pm, Science Library, Map Room

5113 Ham Exams
7 pm, 1-134

4436 Quilting For The Beginner
7:30-9:30 pm, MacGregor seminar room 1.* Preregister by Dec 15.

4566 Build Your Own Speakers
7:30-9 pm, 12-122*

4611 Media In Contemporary India
Government-Owned Media: Distortions And Reality
7:30 pm, 4-231

4759 Roller Skating
7:30 pm, du Pont gym

1 In Celebration Of The Pioneers And Voyagers: To Jupiter, Saturn, Uranus, And Beyond
8 pm, 26-100

753 Algorithmic Probability And Universal Problem Solvers
8 pm, floor 7, NE-43

4813 Scientific Cosmogony And Biblical Creation
8 pm, 9-150

New Listings

In Search Of Excellence
Coleen V. Barry, Douglas S. Smith
Thurs, Jan 9, 16, 10 am-12 noon, E51-311

Videotape presentation of *In Search Of Excellence*: a condensed version of the PBS series, based on the best-selling book. Sponsor: Society of American Military Engineers. Contact: Richard J. Kury, 20E-1, x3-4471.

4712 Dance Workshop Guest Instructor Series
Mon, Wed, Fri, Jan 13-17 3:30-5 pm, T-Club Lounge. Wed-Fri, Jan 22-24, 3:30-5 pm, T-Club Lounge (time)

Motions And Deformations Of Tectonic Plates By Very Long Baseline Interferometry
Thomas H. Jordan
Thurs, Jan 16, 9 am-4 pm, Haystack Observatory

Excursion to Haystack Observatory will focus on precise position determinations of large radio antennae and use in measuring plate motions and deformations. Transportation and lunch provided. Sponsor: Earth, Atmospheric, and Planetary Sciences Department and Haystack Observatory. Contact: Thomas H. Jordan, 54-518, x3-3589.

A Community Mental Health Resource for Women
Hyatt Imam
Thurs, Jan 16, 12:30-2 pm, 4-163

A representative from the Elizabeth Stone House, a mental health facility run by and for women, will discuss women and mental health. Powerful video will be shown. Sponsor: Medical Department. Contact: Constance Bean, E23-205, x3-1316.

Aikido
Dick Stroud
Jan 6-31, 5:30-6:30 pm, exercise room, du Pont

Aikido is a Japanese martial art with emphasis on central term, ki, or centeredness. Non-competitive and primarily defensive. Sponsor/contact: Dick Stroud, x3-7019.

Why SADT Works
Douglas T. Ross
Thurs, Jan 16, 1-3 pm, 4-270

Example of PLEX in action. What meaning means. How models model. Insights on insight, which show that the meaning of an SADT model is the subject being modeled, itself. Sponsor/contact: D. T. Ross, NE43-437, x3-6900.

Science Action Coordinating Committee Revival
Rich Cowan, Seth Tuler, Scott Saleska
Wed, Thurs, Jan 15, 16, 29, 12 noon-2 pm, Jan 22, 23, 6-8 pm, 4-249

Discussion group on political issues involving MIT, such as SDI, Project Athena, curriculum reform, "institutional endorsement," and political apathy/alienation. Sponsor: Louis Menand III. Contact: Rich Cowan, 497-0870.

Epilepsy
Linda Buchwald
Thurs, Jan 16, 2-3 pm, 4-163

Epilepsy, patient care, the doctor-patient relationship, and latest advances in drug therapy. A videotape of a channel swim by a seizure-free individual will be shown. Sponsor: Medical Department. Contact: Constance Bean, x3-1316.

Chinese Cultural Festival
Fri, Jan 17, Bush Room, 10-105

Exhibition Of Chinese Antique Arts
10 am-3:30 pm

Introduction To Chinese Acupuncture
12 noon-1 pm

Workshop Of Chinese Papercutting
11 am-12 noon

The Republic Of China Builds For Tomorrow: Ten Major Construction Projects (slideshow)
10 am

Life In The Republic Of China (slideshow)
2 pm

A Visitors Guide To Taiwan, Republic Of China (slideshow)
3 pm

The Pioneers (film)
7:30 pm, 10-250

Tells of a legendary man immigrating to Taiwan in the 18th century, devoting (and losing) his life to digging an oil well, the first of its kind in Taiwan. Early immigrants from China mainland truly presented. Free.

Quilt And Needlework Display And Workshop
Fri, Jan 17, 12 noon-5 pm, Map Room, Hayden Library, 14S-100

Bring needlework skills or family heirlooms for exhibition. Persons to demonstrate particular stitchery encouraged. Special invitation to join old-fashioned quilting bee. Supplies and instruction provided. Sponsor: Libraries and Women's League. Contact: Nancy Whitman, 235-6040, or Beth Harling, 749-4077.

APO Open House
Tamar More
Fri, Jan 17, 2-5 pm, W20-407

Meet the members of APO, find out about service around MIT and community, maybe paint posters or make candles. Eat food and be merry. Sponsor: Alpha Phi Omega. Contact: Tamar More, 4 Ames St., x5-6111.

(New) Play War On The Chipmunks
Stewart Clamen
Sun, Jan 19, 12 noon, 34-501. Preregister by Jan 16.

WAR is an interactive, real-time, tank-battle game which links players and chipmunks (6,001 computers) together in an exciting format. Teams of two people will compete in the Second Annual Tournament, and we will experiment with larger groups as well. Sponsor/contact: Stewart Clamen, MacGregor D223, x5-9379.

(New) Christian Faculty/Graduate Student Workshop
Fri, Jan 21, 12 noon-3 pm, 491 Student Center

Videotapes and discussion on ways to share Christian faith in academic environment. Bill Bright, president of Campus Crusade, will lead discussion with two professors.

Using The S Statistical Package For Data Analysis, Graphics, and Matrix Calculations
Alan Zaslavsky
Tues, Fri, Jan 21, 24, 1:30-2:30 pm, E40-153

An introduction to the Unix-based S system for potential users. Sponsor: Alan Zaslavsky. Contact Alan Zaslavsky or Robert Busconi, E40-111, x3-8722.

MIT And Military Research From World War II To Vietnam: A Scientific Arsenal Of Democracy?
Rich Cowan, Seth Tuler, Scott Saleska
Wed, Jan 22, 3-4:30 pm, 8-105

Presentation and discussion on Lincoln and Draper labs and their work on SABRE radar, gunsights, missile guidance, MIRV, ABM, MTI, and the space program. Sponsor: Disarmament Study Group. Contact: Chris Linn, x5-9692.

Spanish Tertulia
Margery Resnick
Wed, Jan 22, 3:30-5:30 pm, McCormick country kitchen

There will be a special two-hour session for those interested in speaking spanish. This social event will include listening to music, playing games, and talking in a relaxed atmosphere. Snacks will be served. Sponsor/contact: Margery Resnick, x3-5277, Douglas Morgenstern, x3-3061.

Some Main Problems Of Philosophy

Prof. George Boolos
What Is Truth?
Wed, Jan 22, 2 pm, 37-212

Changes

64 Chair Design Workshop/Competition
Cancelled

75 Trick Roping
Cancelled

808 Review Of Basic Math And Microeconomics
Thurs, Jan 9, 16, 23, 30, 2-4 pm, E38-615 (schedule arranged)

325 Women In Crime

Out Of The Past
Thurs, Jan 16, 7 pm

Diabolique
Tues, Jan 21, 7 pm, 66-100

The Trojan Women
Thurs, Jan 23, 7 pm, 66-110

(dates and film titles)

2059 Laboratory For Nuclear Science And Physics Department Lecture Series

Leptons, Quarks And Other Particles Of Nature
Prof. Richard Yamamoto
Fri, Jan 17, 2 pm, 4-145

630 Sloan School Faculty Open House

Nicholas Majluf
Thurs, Jan 16, 10 am-12 noon, E52-554

Deborah Gladstein
Thurs, Jan 16, 3-4 pm, E52-582

Franco Modigliani
Tues, Jan 21, 3-4:30 pm, E51-332

Tony Wong
Mon, Jan 27, 9-11 am, E53-335

John Henderson and Michael Scott Morton
Tues, Jan 28, 10:30 am-12 noon, E52-598 (complete schedule)

5112 Midnite Movies

Prime Of Miss Jean Brodie
Sat, Jan 18, second floor, Student Center

(New) Chinese Cultural Festival
Fri, Jan 17, Bush Room, 10-150
Workshop in Chinese Papercutting, 10-11 am; The Republic Of China Builds For Tomorrow, 10-2 pm; Life In The Republic Of China, 10 am-2 pm

(New) Some Main Problems Of Philosophy
Is It Possible To Travel Back In Time?
Fri, Jan 17, 2 pm, 37-212 (new date)

4712 Dance Workshop Guest Instructor Series
Fri, Jan 17, 3:30-5 pm, T-Club Lounge, Wed, Jan 22, 3:30-5 pm, Walker 201, Fri, Jan 24, 3:30-5 pm, T-Club Lounge (location, time)

4175 Plasma Fusion Center Seminar Series
Ion Bernstein Wave Heating Experiments on PLT
Fri, Jan 17, 4 pm, NW17-218 (new sublisting)

Assassin: The Game Of International Espionage
Mon, Jan 20, 12 midnight. Preregister by Jan 15. (schedule arranged)

4201 What Should A University Be? MIT In 1986 And Beyond

The Military Influence On MIT: How Much And Why Should I Care. Anyway?
Tues, Jan 21, 2-4 pm, 4-145 (time change)

How Can Students Have A Voice In Setting University Policy?
Mon, Jan 27, 2-4 pm, 4-145 (time change)

4202 Negotiation Games In Architectural And Engineering Design
Tues, Thurs, Jan 21, 23, 3-5 pm, E51-004 (new date, location)

5111 Strat's Rat

Skin
Thurs, Jan 16, 9:30 pm-12:30 am, second floor, Student Center

The Ritz
Thurs, Jan 23, 9:30 pm-12:30 am, second floor, Student Center

Comedy Night
Thurs, Jan 30, 9:30 pm-12:30 am, second floor, Student Center (subtitles added)

866 X-Ray Astronomy 1962-2009
Wed, Jan 22, 10 am-12 noon, Marlar Lounge, 37-252 (new date)

4203 Images Of Science: A Video Exploration
Wed, Jan 22, 10 am-12 noon, E51-218, Mon, Jan 27, 9 am, E51-218, (full day's shooting) Wed, Jan 29, 2-4 pm, E51-218 (new dates, location)

4206 Science On The Airways
Tues, Jan 21, 9:30-12 noon, E51-125 (time change); Wed, Jan 22, cancelled

180 Current Problems In The Earth Sciences
Submarine Hot Springs
Wed, Jan 22, 11 am, 54-100 (subtitle changed)

582 Central America: Developing Alternatives To U.S. Policy

Current Conditions In Central America (seminar)
Tues, Jan 21, 12 noon-2 pm, E52-321

In The Name Of The People (film)
Tues, Jan 21, 4:30-6 pm, 10-250

Human Rights In El Salvador And Nicaragua (seminar)
Wed, Jan 22, 12 noon-2 pm, E52-321

Turmoil And Flight: Central American Refugees And The U.S. Sanctuary Movement (presentation)
Wed, Jan 22, 4:30-6 pm, 4-270

White photos shown

An exhibition of 102 prints by photographer Minor White will be on view at the MIT Museum until March 29.

This is part of a series of great American photographers being shown at the Museum this academic year, beginning with Berenice Abbott this past fall and continuing in the spring with Ansel Adams, April 8-June 30.

The White exhibition was developed by the Philadelphia Museum of Art and covers his career from its early days in the late 1930's until 1968, or the beginning of his MIT career. Mr. White came to MIT in 1965 and taught photography here until his death in 1976.

Ansel Adams described his fellow photographer as "one of the greatest." Continuing, he said, "I do not make this statement lightly. The extraordinary dignity of his work is, for me, the first impact-reaction. The next reaction is to the creative-craft: the sheer beauty of the medium of photography tuned to the exact meaning and feeling of the visualized image... These great photographs live for themselves and for us."

In a statement about his work, Mr. White said: "Surfaces reveal inner states—cameras record surfaces. Confronted with the world of surfaces in nature, man and photographs, I must somehow be a kind of microscope by which the underlying forces of spirit are observed and extended to others."

