

IN LIKE A LAMB—So far March has meant reasonable temperatures and a bit of thawing, as evidenced by the snow melting from this sign for the Ralph Landau Building. Photo by Donna Coveney

## MONDAY NIGHT Cambridge OKs CASPAR, MIT Campus Streets Pact

### By Kenneth D. Campbell News Office

The Cambridge City Council Monday night approved, 8-1, MIT's initiative to build a facility for the homeless in return for control of segments of three city streets and sidewalks along part of Vassar Street.

"A home at last. A home at last. A home at last!" said Richard M. Brescia, president of the Cambridge and Somerville Program for Alcoholism and Drug Abuse Rehabilitation (CASPAR), after the vote. CASPAR has been seeking a permanent home since 1974 and has been housed in temporary trailers on MIT's land at dedicated commission, and to the council for offering us the chance for a new day in Cambridge," Mr. Brescia said.

The vote came three weeks after MIT President Charles M. Vest wrote the city councilors, offering to build CASPAR a 12,000 square foot, 55-bed facility on the land at 240 Albany Street. CASPAR will have a 20-year renewable lease on the land at \$1 a year. The proposal is estimated to cost MIT \$1.8 to \$2 million.

The Feb. 8 initiative brought an affirmative same-day response from the three city councilors on the nine-member Special Committee on CASPAR Siting Team. Councilors Jonathan Myers (chair), Sheila T. Russell and

Alice Wolf wrote President Vest, "We

particularly hearken to your words

emphasizing 'a new era in town gown

(continued on page 4)

### \$48M EXPECTED

## Fusion Research Gets Major Grant

The Plasma Fusion Center (PFC) has received first-year funding of \$7 million from the Department of Energy under a five-year cooperative agreement that will provide an estimated \$48.5 million in total support for the development of fusion technology.

The agreement covers 15 subtasks designed to advance critical technologies for an engineering test reactor such as the Internation Thermonuclear Experimental Reactor (ITER), and to develop a vision for future commercial reactors. The tasks will build on previous studies and experimental work done at the Center and will carry out the work in the context of the various national design activities.

The period of the agreement is intended to parallel the proposed sixyear Engineering Design Activity (EDA) phase of the ITER project with participants in the US, the European Community, Japan and Russia, who signed an international cooperative agreement last July.

The goal of the ITER EDA is a test facility design that would, if built, demonstrate the basic scientific and technological feasibility of fusion energy.

7 ADMINISTRATIONS Clinton Plans to Name Deutch to DOD Post

**P**resident Clinton has announced his intention to nominate Professor John M. Deutch of MIT to hold a key technology post as Under Secretary for Acquistion in the Department of Defense.

In that post, Professor Deutch, former MIT provost and a chemist widely known for his work in science and technology policy, would head the DOD's technology and acquisition activities. He would be the third ranking officer of the Department, reporting directly to Les Aspin, the Secretary of Defense, and the Deputy Secretary of Defense.

If confirmed, Professor Deutch will have major responsibility for weapons acquisition, technology development, and economic conversion.

From October 1977 to March 1980, Professor Deutch was on leave from MIT at the US Department of Energy, as director of the Office of Energy Research (1977-79), as acting assistant secretary for energy technology (January-June 1979), and as under secretary of the Department (August 1979-March 1980).

Professor Deutch also would serve in his seventh presidential administration, having held advisory or consulting posts in the administrations of Presidents Kennedy, Johnson, Ford, Carter, Reagan and Bush.

Professor Deutch was given the rank of Institute Professor at MIT in 1990. The title recognizes distinguished accomplishments in scholarly, educational, service and leadership pursuits. There are usually no more than 12 active Institute Professors on the MIT

Professor Deutch's research inter-

ests include non-equilibrium statistical



#### John Deutch

mechanics, structure of fluids, dielectric and magnetic relaxation, light scattering and polymer theory.

As MIT provost, Professor Deutch was the Institute's chief academic officer from 1985 until October of 1990, when he returned to teaching and research in the Department of Chemistry. He was dean of the MIT School of Science at MIT from 1982 to 1985 and headed the Department of Chemistry in 1976 and 1977.

He served as a member of the President's Nuclear Safety Oversight Committee (1980-81) and of the President's Commission on Strategic Forces (1983-84).

the Army Scientific Advisory Panel

(1975-77) and served on the Defense

(continued on page 4)

Professor Deutch was a member of

The design activity will be carried out at three centers in San Diego, Naka, Japan; and Gerching, Germany. Professor Ronald R. Parker, director of the PFC, is on leave from MIT to serve as deputy director for ITER and head of the Garching ITER co-center. Dr. Richard Thome, head of the fusion energy and technology division at the PFC, is also on leave from the Center and will serve as the head of the Magnetics Division at the ITER co-center in Naka.

The Development and Technology Program is headed by Dr. D. Bruce Montgomery, associate director for engineering and technology. The development of superconducting materials and cunductors is one of the program's activities. The ITER Magnetics R&D program is the largest cocenter of the agreement, with ITERrelated base technology and general base technology in the areas of gyrotron development, reactor studies and safety studies on ITER diverter development as the other major task groups supported by this agreement.

MIT's PFC has one of the nation's broadest research programs to investigate the physics and engineering aspects of magnetic fusion. It is recognized as one of the world's leading university research laboratories in confinement fusion and plasma research, with its research programs producing significant results on several fronts, including major confinement results on the Alcator series of tokamaks.

The objective of this latest agreement with the DOE is to advance technology to a point that will allow ITER to decide on a construction phase and to make advances in such necessary technologies as conductors and materials development and computer code development.

**INBRIEF** 

### MAKE A GIFT

The Technology Community Association/Red Cross spring blood drive will begin Friday, March 5 and run through Friday, March 12, including Saturday, March 12, including Saturday, March 6. Hours are 10am-3pm except for Wednesday, March 10 (1-6pm) and Friday, March 12 (noon-5pm). All members of the community are encouraged to contribute.

#### APPLY NOW

Though it's barely March,

240 Albany Street since 1979.

"I'm absolutely grateful to President Vest for his gracious offer, to Mayor Reeves for appointing such a

### AT&T, DEC, MIT

## Consortium to Develop Information Highway

faculty.

A T&T, Digital Equipment Corporation and MIT have formed a precompetitive consortium on wideband (high-capacity) all-optical networks—high-speed "information highways."

The Wideband All-Optical Networks Consortium will address the challenges of using the evolving high capability of optical-fiber technology to enhance the national information infrastructure, adding a "super-highway" that will provide flexible transport, common conventions and common servers. Such an enhancement would allow access by multi-gigabit (billion-bit)per-second computer networks and would transport their combined data streams, reaching terabits (trillions of bits) per second of capacity.

The consortium, which will receive \$8.4 million in funding from the Defense Advanced Research Projects Agency (DARPA), will study the architecture of all-optical networks, advance the relevant technology and construct an extensive test-bed system.

AT&T, Digital and MIT have had longstanding interests and demonstrated commitments in communications, networks and optics. Each brings with it a substantial research and development program in networks and/or optical communications. By working together, sharing expertise and resources, consortium members say they expect to speed the development of high-performance information highways.

"The test-bed will form a proof-ofconcept demonstration of a universal, scalable, optical network and will provide a common forum in which the interactions of applications, architecture, and technologies may be investigated," said Vincent W.S. Chan, consortium director and leader of the MIT team. Dr. Chan is also associate head of MIT Lincoln Laboratory's Communications Division.

"Our long-term goal is to pursue the research and development of the technology, architecture and applications necessary to build such a network," he said. "Our more immediate goal is to determine how these challenges can best be met and to demonstrate that capability in a manner that can be fur-(continued on page 4) applications for summer Day Camp are available at the du Pont equipment desk, Alumni Pool and in the Day Camp office, Rm W32-123. If you cannot pick up a form, leave your name and address at x3-2913 and one will be sent. Day Camp will have four two-week quarters beginning June 28 and ending August 20.

#### SAT PREPARATION

Registration for an SAT preparation program run by the MIT Educational Studies Program will be held Sunday, March 7, at 2pm. Interested students should come to 77 Mass. Ave. and follow the signs to the registration room. The program will be held Sunday afternoons March 14 to April 25. For more information call x3-4882.



\* -Open to public \*\*-Open to MIT community only \*\*\*-Open to members only

### ANNOUNCEMENTS

- The Medical School Admissions Process\*\*— Mar 3: A discussion of the basic procedures of applying to medical school. Office of Career Services and Preprofessional Advising procedures will be covered. 10am, Rm 2-190. More info: x3-4737.
- Booksale\*\*—Mar 4: Sponsored by the MIT Libraries, 10am-3pm, Dewey Library Seminar Room (Rm E53-212). Books in all areas of Political Science, Economics, and Management.
- 15th International Women's Day Radio Celebration\*—Mar 7: From 10am-10:30pm on WMBR 88.1 FM.
- MCAT Announcement Booklets\*\*—Now available in Rm 12-185. Booklets include application, sample questions, test locations and financial aid information. Application submission deadlines: Mar 19 for April exam, Aug 20 for Sept exam.
- Career Services and Preprofessional Advising Recruitment Presentations\*\*--Mar 4: Lattice Semi Conductor, 6-8pm, Rm 4-149. Mar 8: PCSI, 7-9pm, Rm 4-153. Mar 11: Pixel, Inc, 7-9pm, Rm 4-153. Mar 11: Allied Signal, 5-8:30pm, Rm 4-153. Northern Telecom, 6-8pm, Rm 4-149.
- AA-1 Immigrant Visa Lottery\*\*—Through Mar 31: 40,000 immigrant visas will be provided during this application period to nationals from 37 specified countries. Details regarding application procedures are available in the International Student Office, Rm 5-106.
- MIT Pistol & Rifle Club Basic Pistol Marksmanship Course\*\*—Starts Mar 11, 4 nights: Mar 11, 12, 18, 19, 6-9pm. DuPont pistol range. Course covers safe handling, storage and use of firearms as well as developing marksmanship skills to meet local police departmental requirements for pistol permits. Fee covers everything. Info/registration: Frank Gauntt, Draper x8-1476 or Val Lowe, Draper x8-3924.
- Talbot House. Weekdays except for the 24-26 are available in March at Talbot House, MIT's retreat in Woodstock, Vermont. The House is reserved for groups of 15-27 people at a cost of \$52/student, \$60/non-students, \$30/children, which includes 2 nights, 2 breakfasts and one dinner at the House. Reservations for these dates are accepted on a first-come, firstserved basis. Contact Sarah at x3-4158, W20-549, or <stom @mit> for more information.

- A Safe Ride\*\*—Call 253-2997 for a free ride within MIT boundaries. Service operates Sun-Wed 6pm-3am; Thurs-Sat 6pm-4am. Guide to shuttle stops available.
- Free Museum of Science Admission for MIT Students—With MIT student ID, provided by Mass Beta chapter of Tau Beta Pi, the National Engineering Honor Society. Reduced admission to special exhibits.
- The Furniture Exchange at MIT\*\*—New hours and location: Tues/Wed/Thu, 10am-4pm, Bldg WW15, 350 Brookline St.
- Language Conversation Exchange\*\*— Internationals and Americans are invited to participate in this program which matches persons interested in practicing a language and getting to know someone from another country. Presently, there is a need for English partners to fill continued requests of internationals wanting to practice and improve their English. Native Russian, German, Swedish, Arabic, Swahili, Thai and especially Italian speakers also needed for English speakers wanting to practice these languages. Sponsored by the Wives' Group, call x3-1614 for more information.
- Arts Hotline—Recorded information on all art events at MIT may be obtained by dialing x3-ARTS. Material is updated every Monday morning.

### RELIGIOUS ACTIVITIES

- The Chapel is open for private meditation 7am-11pm daily.
- Baptist Student Fellowship at MIT\*\*--Meet for supper on Tuesdays at 5:15pm at 312 Memorial Drive, then move to the chapel across the street for worship at 6pm. Call x3-2328 for more information.
- Morning Bible Studies\*\*—Fri, 7:30-8:30am, L-217. Ed Bayliss, x3456 Linc.
- Tech Catholic Community\*\*—Regular weekday mass Tues & Thurs 5:05pm, Friday 12:05pm, Saturday 5pm, Sunday 10am & 5pm. Call x3-2981.
- Graduate Christian Fellowship\*\*—We invite you to join us. Open to believers and seekers, GCF is a group of graduate students, faculty, and staff who desire to know God better and reflect the love and presence of Jesus Christ. Weekly meetings in Student Center, DR 1&2, Thursdays at 6pm. We also have Bible studies and a Faith & Technology Roundtable. Info: Andrew Parris x3-2319.
- Christian Science Organization\*\*—Meets Thursdays at 7:30pm in the Chapel. We'll share thoughts about God, hear testimonies of Christian healing and read from the Bible. All are welcome! Call x3-8797 or <\norford@ eagle.mit.edu> for further information.
- MIT Hillel\*—Mar 5: Hillel-Generations Shabbat/Purim Dinner, 6:30pm, Ashdown House Dinning Rm. Reserve by 3/4 at Kosher Kitchen, Walker Rm 007. Mar 6: Purim Megilla Reading, 7pm, Student Center Mezzanine Lounge. Bring a noisemaker, wear a costurne, refreshments served. More info: x3-2982.
- MIT Korean Baptist Student Koinonia (KBSK)\*\*—Friday Night Bible Study and Fellowship 7-8:30pm, Private Dining Room #3, 3rd floor of Student Center. Everyone is

### Crimewatch

The following incidents were reported to the MIT Campus Police Department between February 18 and 25:

Feb 18: *Bldg 1*: mailbox tipped over; MIT Police assist State Police with a body discovered in the Charles River. Cambridge Fire rescue squad pulled body from the river and transported to Beth Israel Hospital where he was later pronounced dead. Victim was not affilated with MIT; *Bldg 5*: jacket and wallet stolen, \$130.

Feb 19: Burton House: male arrested for trespassing; Rockwell Cage:

welcome, refreshments provided. For more information contact Chris Pak x3-9342 or 876-8594.

- Lutheran-Episcopal Ministry at MIT\*\*— Wednesday worship, 5:10pm, MIT Chapel, followed by supper and conversation across the street at 312 Memorial Drive, Contact Rev. Susan P. Thomas x3-2325 or Rev. Scott Paradise x3-2983.
- Lincoln Laboratory Noon Bible Studies\*—Tues & Thurs, Kiln Brook III, Rm 239. Annie Lescard, x2899 Linc.
- MIT Muslim Students Association\*—5 daily prayers in the prayer room, Ashdown House (Bldg W-1) west bsmt. Friday congregation: 1:10-1:45pm in Ashdown House (Bldg W-1) west bsmt. Info: x8-9755.
- MIT Orthodox Christian Fellowship\*\*—Meets every Wednesday at 5:30pm in Private Dining Rm #1 in the Student Ctr for dinner/ fellowship/discussion followed by Vespers (evening prayer) in the MIT Chapel. Open to Eastern Orthodox Christians and those interested in learning about traditional Christian Faith. Info: Mike Decerbo, Dorm x5-7569.
- MIT Vedanta Society\*—Meditation and discourse on the Bhagavad Gita with Swami Sarvagatananda, MIT Religious Counselor and Head, Ramakrishna Vedanta Society of Boston, every Friday at 5:15pm in the MIT Chapel.

### OPPORTUNITIES

- The Tenth Annual Carroll L. Wilson Awards\*\*—The aim of these awards is to provide opportunities for MIT undergraduate and/or graduate students to explore a program of research and/or study of an important societal problem with international dimensions. Application forms and additional information are available from Sally Gatewood, Rm 3-209; Joanna Hills, Rm E15-229; Susan Kendall, Rm 20A-023, and the Undergraduate Education Office, Rm 20B-141. Deadline: Mar 19.
- I. Austin Kelly III Prize Competition\*\*—Two prizes of \$500 each for scholarly or critical essays in the following fields: Literary Studies, History, History of Science and Technology, Musicology, Archaeology, Anthropology, Art History, Economic History, Politics, Film and Media Studies, and Philosophy. Rules and guidelines available at History Office, Rm E51-210, x3-9846. Deadline: Apr 22.

### **STUDENT JOBS**

There are more job listings available at the Student Employment Office, Rm 5-119. The Student Employment Office has many "one time only" jobs. Many students find these jobs a good way to earn money fast.

- Off Campus, Non-Technical, Marketing. Campus Manager needed to organize and direct an on-campus sales team to market Spring Break travel. Qualifications: sales oriented, goal achiever. Compensation: 1 free trip or \$500 for every 20 trips sold. Prior experience preferred, but not required. Contact: Mario Ricciardelli, Take a Break, 424-8222.
- Off Campus, Non-Technical, Childcare. A professional Cambridge couple is in need of a babysitter to take care of their three year old son. References required. Contact: Tom Cosgrove, 623-9875.
- Off Campus, Technical, Summer. Someone is needed for the design, specification, development, and testing of new systems. Assets: math or computer science major, C and C++ programming experience, and good communication skills. Will help arrange housing. Send resume. \$2000/month. Contact: Adrienne Morse, Central Point Software, 989 E. Hillsdale Blvd. Suite 260, Foster City, California 94404, Fax: (415) 349-4664.
- Off Campus, Technical, Programming. Fox Computer Rentals is seeking student to work as an inhouse programmer and to assist with the support of their Novell network and its users. Must be comfortable with DOS envi-

teer positions for next summer and fall are now being accepted. A wide range of opportunities exist, through the National Park Service, US Forest Service, US Fish and Wildlife Service, and other conservation agencies. Travel and housing expenses and a food allowance are provided to volunteers. There is no deadline, but applicants interested in summer positions should respond in early March, if possible. Contact: SCA at 603-543-1700, or write: SCA, RA Program, PO Box 550, Charlestown, NH 03603-0550.

### UROP

The UROP office invites MIT and Wellesley students to join with faculty members to pursue research projects of mutual appeal. For detailed information on procedures, please read the participation section of the UROP 1992-1993 Directory, available in the Academic Affairs Offices, 7-104 and 20B-140. Direct UROP funding for Spring is now depleted; please consider alternative possibilities including academic credit.

Summer information is now available. Summer proposals for direct UROP funding will be accepted on a rolling basis starting April 1, 1993. Please watch for pertinent information on the UROP bulletin boards.

Faculty supervisors wishing to have projects listed may send brief descriptions to 20B-140, call x3-7306, or email to <urop@athena>.

MIT Center for Space Research. We are looking for a student to assist in the development of software tools to analyze X-Ray astronomy data from the X-Ray Timing Explorer, a satellite to be launched in 1996. This work involves tasks such as developing graphical user interfaces for analyzing science data, and writing software tools for performing astronomical data analysis. Programming experience is required, particularly with C++ or C. Familiarity with Object-Oriented software concepts, and data analysis algorithms is helpful. Faculty supervisor: Prof. Hale Bradt, Rm 37-587, x3-7550. Contact: Steve Berczuk, Rm NE80-6015, x3-3840, <berczuk@space.mit.edu>.

Parsons Laboratory for Water Resources and Hydrodynamics, Department of Civil Engineering. An extensive environmental monitoring program is in progress for a watershed located near campus. The UROP position available involves one face of the program: a hydrologic study for the area. Primary tasks include: 1) proper streamage operation and maintenance, and 2) calibration of the equipment. Analysis of the collected data is encouraged. Requires approximately 10 hours per week and a valid driver's license. Faculty supervisor: Prof. Frank Perkins, Rm 3-132, or Rm 48-209, x3-1957. Contact: Helena Solo, Rm 48-336, x3-3897.

- C/AWK/LEX/YACC Programming at Sloan School of Management. Looking for a programmer to 1) convert a semi-free-form text database to a structured, text database on UNIX platform and 2) write an interface for a PC-based scanner to read in questionnaires. Funding is available. Faculty supervisor: Prof. Thomas Allen, Rm E52-536, x3-6651. Contact: Varghese George, Rm E40-169, x3-2430, <vgeorge@athena.mit.edu>.
- Technology Transfers and the Role of Multinationals in the Auto Industry. The International Motor Vehicles Program is looking for one student to assist us in current research during the spring semester. The project focuses on technology transfers and the role of multinational enterprises in the automobile industry, with a particular interest in national policies in foreign plants. Work will involve directed library research, synthesis of material that is researched, phone calls to government and industry sources, and some administrative support tasks. There will be and excellent opportunity for a student to take higher levels of responsibility if they are interested and qualified. Faculty supervisor: Dr. Frank Schuller, x3-1667. Contact: Dr. Schuller or Sandra Rothenberg, Rm E40-242A, x3-2467.

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Frequent schedule updates now appear on

Mar 9: Channel 8: 4-5:30pm—Live coverage of the MIT VLSI Seminar: Ran-Hong Yan, AT&T. Channel 10: Same as Mar 5.

- Mar 10: Channel 8: 11am-12:30pm—Live coverage of the MIT Optics and Quantum Electronics seminar: "High Resolution Optical Reflectometry Using Short Coherence Length Light Sources," Eric A. Swanson, Lincoln Laboratory. Channel 10: Same as Mar 5.
- Mar 11: Channel 8: 11am-5pm—Live coverage of the C.A.E.S. Videoconference: "Object-Oriented Systems," Prof Duvvuru Sriram. Channel 10: Same as Mar 5. This program will repeat until 12 noon.
- Mar 12: Channel 10: 5pm—Physics 8.02 Help Session #7 with Prof Walter Lewin. This program will repeat until Thursday, March 18, 12 noon.

Mar 13: Channel 10: Same as Mar 12.

Mar 14: Channel 10: Same as Mar 12.

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SCOLA Schedule. Channel 13. SCOLA schedules are subject to change without notice. Watch SCOLA at 10:25am for daily schedule updates.

ay-Friday	Saturd	lay
Koran readings	1:00a	Koran readings
Russian News	1:15	Canada this week
Poland	2:00	Croatia
Kenya	3:00	Latvia this week
Malaysia (TV7)	4:00	Lithuania this week
Vietnam (VTV)	5:00	Czechoslovakia
Czechoslovakia (F1)	6:00	Sweden this week
Philippines (TV5)	7:00	Mexico (ECO)
Romania (TVR 1)	8:00	Germany this wk
Chile (24 Horas)	10:00	Taiwan, China
Algeria	10:25	SCOLA Schedule
Pakistan	10:30	Armenia this week
Egypt	11:30	SCOLA Showcase
Jordan (JTV)	1:00p	Japan (Fujisankei)
Mexico (ECO) Live	2:00	Beijing, China
France (A2)	3:00	France (A2/TF1)
Nouvelles (Canada)	4:00	Italy
Taiwan	5:00	Chile this week
SCOLA Schedule	6:00	Japan - Fujisankei
German (SFB ARD)	7:30	Sima Azadi (Iran)
Japan (Fujisankei)	8:30	Russia this week
	10:00	Slovenia Mag.
Japan (NHK) Russia-Live (News 1		Beograd, Yugosl.
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China (CCTV)	11:30	Poland this week
Italy (RAI 1,2)		
Sweden	Sunda	y name and
Lithuania (2LTV)		
Latvia (VHS)	1:00a	Koran readings
Tai Yuan, China	1:15	Arabic countries
Croatia (DNEVIK)	4:00	Iran this week
Slovania	5:00	India/Pakistan
France (A2)	6:00	Jordan this week
Poland	7:00	Mexico (ECO)
Brazil (GLOBO TV)	8:00	Chile this week
UAE	9:00	Brazil this week
Beograd Yugoslavia	10:00	Taiwan
Nouvelles (Canada)	10:25	Scola Schedule
Armenia	11:00	Tai Yuan, China
Iran (IRIB 1)	1:00p	Armenia
	2:00	Beijing, China
	2:30	Malaysia this week
	3:00	France this week
	4:00	German this week
	5:30	Hungary (NBN)
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News Office

bracelet left unattended, stolen, \$400; *Muddy Charles:* cellular phone left unattended, \$320; *Alumni Pool:* bike stolen, cable lock cut, \$200; *Bldg NE43:* bike stolen, \$325; *Faculty Club:* wallet stolen \$55.

Feb 20: Westgate: domestic problem.

Feb 21: Burton/MacGregor alley: lamp globes vandalized; Haywood parking lot: dumpster fire; Senior House: female conned student out of \$70 by saying she had a sick baby; Kresge Lot: '84 Toyota stolen.

Feb 22: Walker: leather jacket stolen, \$350.

- Feb 23: Hayden: wallet stolen \$5; Infinite Corridor: male approached a female handing out business cards; Senior House: compact disc player stolen, \$800; Deacon St. Lot: hit and run motor vehicle accident; Bldg 34: bike stolen \$150; Bldg 13: a Hershey chocolate kiss, a banana and orange stolen from a desk top, sentimental value; Bldg 2: wallet \$35.
- Feb 24: MacGregor: graffiti; Baker House: victim closed room door, was passed by someone "strange looking," only to return and find \$89 missing from wallet; another victim had \$70 taken; Bldg 13: wallet removed from coat pocket, \$5.

Feb 25: Bldg 11: suspicious person; Bldg E34: person vandalizing toilets; Bldg E17: wallet stolen, \$65; Westgate: obscene phone calls. users. Must be comfortable with DOS environment, and have general knowledge of programming, higher level languages, and database techniques. Send resume. 15-20 hrs/wk. Contact: Ann Russo, Fox Computer Rentals, 142 Cambridge Street, Boston, MA 02129.

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The MIT Public Service Center has compiled the following volunteer opportunies.

- Boston Urban Gardeners. BUG provides advocacy, design, construction, and maintenance for Boston's community gardens and gardens at shelters, schools, and other public lands. Volunteers to assist in office support would be especially welcome at this time, at 46 Chestnut Ave. in Jamaica Plain.Contact: Greg Murphy at 522-1259.
- MIT Educational Studies Program. Create and teach a course in a subject that interests you; past topics have varied widely, from physics, to bicycle repair, to creative writing.For more information or a teacher application contact the ESP office. Contact: Educational Studies Program at x3-4882; Student Center, W20-467.

The Student Conservation Association, Inc. Applications for Resource Assistant volunTechInfo. For more information about cable at MIT, call Randy Winchester at x3-7431, Room 9-050, e-mail: randy@mit.edu; tvmessages@mit.edu, x3-9383, E19-722E.

Mar 3: Channel 8: 11am-12:30pm—Live coverage of the MIT Optics and Quantum Electronics seminar: "Development of Diode Pumped Solid State Lasers for Applications in Lidar," James Harrison, Schwartz Electro-Optics. Channel 10: Physics 8.02 Help Session #5 with Prof Walter Lewin.

Mar 4: Channel 10: Same as Mar 3. This program will repeat until 12 noon.

Mar 5: Channel 10: 5pm—Physics 8.02 Help Session #6 with Prof Walter Lewin. This program will repeat until Mar 11, 12pm.

Mar 6: Channel 10: Same as Mar 5.

Mar 7: Channel 10: Same as Mar 5.

Mar 8: Channel 8: 4-5:30pm—Live coverage of the MIT-EECS Colloquium: "The Ghost of the Executed Engineer: Technology and the Fall of the Soviet Union," Loren R. Graham, MIT, Program in Science, Technology and Society. Channel 10: Same as Mar 5. Director: Kenneth D. Campbell; Associate Director: Robert C. Di Iorio; Senior Assistant Director: Charles H. Ball; Assistant Directors: Donna Coveney, Joanne Miller, Elizabeth A. Thomson; Administrative Assistant: Myles Crowley; Design/Editorial Assistant: Lisa Damtoft; Receptionist: Chandra Wilds. Tech Talk is published weekly except for

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### MARCH 3, 1993

### GLOBAL NOTE

## Ronald Prinn to Hold **TEPCO** Professorship

A \$5 million contribution from Tokyo Electric Power Company (TEPCO) has endowed a professorship at MIT and established the TEPCO/ MIT Joint Global Environmental Research Program. TEPCO, the world's largest private



area of Japan, including Tokyo. Dr. Ronald G. Prinn has been selected as the first holder of the **TEPCO** Professorship. Dr. Prinn

is the internation-

utility company,

serves the Kanto

Prinn

ally respected atmospheric and planetary chemist who directs MIT's Center for Global Change Science.

MIT Provost Mark S. Wrighton, who made the announcement, said the TEPCO contribution would be of great help to the Institute in its efforts to seek solutions to "immense global environmental problems which have long time horizons.'

Research in the TEPCO/MIT Program at the outset is expected to focus on three main areas relevant to global change:

• Intregrated studies of the science and policy of global change, including evaluation of emission controls on the energy industry and the role of utilities in improving the global environment.

• Scientific investigation of the global climate with an initial emphasis on the role of the ocean circulation.

• An investigation of whether a technology can be developed to turn carbon dioxide into an alternative fuel.

Professor Wrighton chairs the MIT Council on Global Environment, which coordinates MIT's environmental research agenda. Other recent commitments to MIT for environmental studies include a \$1 million grant from Exxon Corporation (Dallas, TX) for the MIT Joint Program on the Science and Policy of Global Change and a \$3 million gift from The Martin Foundation (Elkhart, IN) to fund a research fund and professorship in environmental studies

The Council will be the leadership group connecting TEPCO representatives and MIT scientists in pursuing a mutually interesting array of research projects. Professor Wrighton will select the specific research projects to be supported under the joint TEPCO/MIT program after soliciting suggestions from the MIT community and receiving suggestions and comments from TEPCO and from the MIT Council on Global Environment.

Professor Prinn, a faculty member at MIT since 1971, focuses his research on a study of the chemistry, dynamics and physics of the atmospheres of Earth and the other planets and on the chemical evolution of the atmospheres. In addition to serving as director of the MIT Center for Global Change Science, he is co-director of the MIT Joint Program on Science and Policy of Global Change.

Professor Prinn is the principal investigator for the NASA-supported Global Atmospheric Gases Experiment (GAGE), which has measured continuously since 1978 the global rates of increase of the concentrations of trace gases involved in the greenhouse effect and ozone depletion. He is currently the chairman of the Steering Committee for the International Global Atmospheric Chemistry Program of the International Council of Scientific Unions (ICSU) and a member of NASA's Space Science and Applications Advisory Committee.

Professor Prinn holds the BSc in chemistry and pure and applied mathematics (1967) and the MSc with first class honors in chemistry (1968), both from the University of Auckland, New Zealand, and the ScD in chemistry (1971) from MIT.



MINI MOTORS-Representatives from Ford Motor Company visited Professor Harry West's 2.70 class (Introduction to Design) last week to meet students whose hands on undergraduate experience in design will benefit by a \$36,000 donation Ford is making in collaboration with BGAM, which in itself is a collaboration of Robert Bosch, the German electronics firm, and General Electric. Professor West, second from right, said the funds are being used to purchase electric motors for the and General Electric. Polessol west, second from right, sub and the ford sub band second motors will eventually be working for the automaker. Last June Ford was the single largest recruiter of mechanical engineering students. Mechanical engineering sophomores Rebecca Fahrmeier and Daniel Quintanila joined the Ford representatives, Tom Logar, left, a Sloan Fellow in 1985, and Mark Critz, technical planning manager in Ford's climate control division. **Photo by Donna Coveney** 

### PROJECT HEADLIGHT

## **IBM Grant to Aid K-12 Program**

BM has awarded a \$650,000 equipment and software grant to MIT as part of the company's program for "Improving K-12 Education through Innovative Uses of Information Technology."

The grant to the Learning and Common Sense Section at MIT's Media Laboratory will enable a major upgrade of personal computers and software for Project Headlight at the James Hennigan Elementary School in Boston.

Project Headlight was established as an alternative model for use of

computers in schools in 1985 under the vision and direction of Professor Seymour A. Papert of the Media Laboratory and his MIT research team, in collaboration with the IBM Education Group in Austin, TX, and the Boston Public School System. Dr. Papert is the LEGO Professor of Learning Research at the Media Laboratory

His theory of Constructionism advocates educational environments in which children learn by designing and building artifacts, which might take the form of a computer program, a robot, a multimedia display or a video game. The Media Lab research has combined computers and telecommunications to create new media for playful explorations controlled by students.

Constructionism also recognizes that students and teachers have varied learning and teaching styles; certain uses of technology are better able to personalize the learning and teaching processes.

For the past seven years, Project Headlight has been a model for computer-based learning and teaching that is on the cutting edge of educational research. The grant from the IBM Education and University Relations Division will upgrade the project's hardware and software from PCjrs to 125 PS/2 Model 25-386 with the appropriate servers, printers and network software, facilitating multimedia programming, complex learning projects, and more general data sharing among participants.

### GEM FELLOWS

## 17 Receive Funds for Graduate School

S eventeen MIT undergraduates have received 1993 fellowships for graduate study from the National Consortium for Graduate Degrees for Minorities in Engineering and Science (GEM), Isaac M. Colbert, associate dean of the Graduate School, has announced.

The MIT recipients represent 7.6 percent of the 223 Engineering Master's Fellowships that were available from the GEM consortium this year.

"In the past four years, MIT students have been exceptionally successful in competing for these fellowships and MIT has been successful in enrolling many of the recipients in our graduate programs," Dean Colbert said.

He said 58 students have received fellowships since 1990, and 36 GEM fellows have studied or are studying at MIT. Altogether, MIT has enrolled 126 GEM fellows as graduate students.

Additionally, he said, MIT is among the most successful of the 68 GEM member schools in graduating its GEM fellows. In the 17-year history of the program, MIT had achieved a 94 percent completion rate through June of 1990

"Only nine other participating universities can boast an equal or better record," he said. "Among those, only the University of California at Berkeley, at 95 percent, and Cornell, at 97 percent, are not predominantly minority institutions."

"The GEM program, of which MIT was a founding member, is one of the few national fellowship programs to actually increase the pool of minority students who are eligible for admission to graduate programs," Dean Colbert said. "Until recently, the program focused exclusively on funding minority students for master's degrees in engineering. Since 1990, however, there have been doctoral funds available in both science and engineering.

Of 18 GEM fellows currently study at MIT, four are doctoral fellows-two each in science and engineering.

### STORY IDEAS WELCOME

## Thomson Promoted In News Office

lizabeth A. Thomson, assistant E editor of MIT Tech Talk and News Office staff writer since 1988, has been promoted to the position of assistant

> director for science and engineering news. In her new position, she will be

initiated a new feature in MIT Tech Talk, 'Notes from the Lab.'

"Her appointment implements a News Office plan to increase the coverage of science and engineering news at MIT. Associate Director Robert C. Dilorio, who has covered engineering and science news at MIT since 1973, will serve as managing editor for sci-

### Litster Receives Langmuir Award

Dr. J. David Litster, vice president and dean for research and professor of physics, has been awarded The Irving Langmuir Prize in Chemical Physics



by The American Physical Society.

He will receive the \$10,000 prize for his pioneering experimental and theoretical studies of phase transitions in unusual states

primarily light scattering and high resolution X-ray scattering. Much of the work was carried out in collaboration with Dr. Robert J. Birgeneau, dean of the School of Science and Cecil and Ida Green Professor of Physics.

The prize, established in 1964 by the General Electric Foundation, is given to recognize and encourage outstanding interdisciplinary research in chemistry and physics in the spirit of Irving Langmuir, a noted scientist. It is for research in the fields of chemical physics or physical chemistry carried out within the 10 years prior to the award.

Dr. Litster, who received a bachelor's degree in engineering from McMaster University in Hamilton, Ontario, Canada, and the PhD in physics from MIT in 1965, joined the MIT faculty in 1966. He has been director of both the Center for Materials Science and Engineering and the Francis Bitter National Magnet Laboratory.

He is a fellow of The American Physical Society and of the American Academy of Arts and Sciences.

The master's fellowship provides tuition and fees, a \$6,000 annual stipend, and paid summer employment with a GEM member company. Doctoral fellows receive a \$5,500 tuition allowance plus a \$12,000 annual stipend. AT MIT, both fellowships are supplemented by departmental funds, usually in the form of research or teaching assistantships and, as appropriate, by centrally managed funds through the Graduate School office.

The following MIT juniors and seniors received 1993 Engineering Master's Fellowships:

Monica C. Arozarena, Griffin L. Davis, Cheryl D. Jordan, Portia R. Lewis, Remigio M. Perales, Yvonne R. Venzen, Malcolm Casselle, Claire L. Hypolite, Aria E. Landstrom, Alexander E. Long, Juan D. Ramos, Laurence O. Ward, Garvin H. Davis, Mary E. Johnson, Dale L. LeFebvre, Barbara M. Nichols and Melanie Rodriguez.



Thomson

the lead News Office writer communicating MIT science and engineering research and teaching developments to the

public through the news media and MIT Tech Talk.

Ms. Thomson commented, "I welcome story ideas from MIT faculty and researchers, whether they are based on interesting results being published in journals, or simply an area of research or teaching that the researcher is excited about and that might be of interest to the public." She can be contacted at x8-5402 or via e-mail, <thomson@mit.edu>.

Kenneth D. Campbell, director of the News Office, said in announcing the appointment, "For the past year, the major part of Elizabeth Thomson's responsibilities has been covering science and engineering news. She recently

ence and engineering news. He will coordinate the work in that area of all News Office staff, particularly the three science and engineering reporters: Mr. Dilorio, Ms. Thomson, and Ms. Thomson's successor in the position of staff writer and assistant editor of MIT Tech Talk."

Mr. Campbell said a search to fill that position is under way

Ms. Thomson has been a staff member at MIT since 1985. Before joining the News Office, she was a technical editor in MIT's Ceramics Processing Research Laboratory, editing articles written for professional journals by researchers in the Department of Materials Science and Engineering. She also edited and produced quarterly 150-page research summaries for the laboratory.

Ms. Thomson graduated from Cornell University in 1984 with a B.S. degree in biology. She is a member of the National Association of Science Writers.

# Classified Ads

Tech Talk ads are intended for personal and private transactions between members of the MIT community and are not available for commercial use. The Tech Talk staff reserves the right to edit ads and to reject those it deems inappropriate.

**INSTRUCTIONS:** Ads are limited to one (of about 30 words) per issue and may not be repeated in successive issues. All must be accompanied by full name and extension. Persons who have no extensions or who wish to list only their home telephones, must come in person to Rm 5-111 to present Institute identification. Ads using extensions may be sent via Institute mail. Ads are not accepted over the telephone. Faxes are not accepted.

All extensions listed below are campus numbers unless otherwise specified, i.e., Dorm, Lincoln, Draper, etc.

MIT-owned equipment may be disposed of through the Property Office.

Deadline is noon Friday before publication.

### FOR SALE

Sony Betamovie camera (BMC-200), 2 four-hr batteries, recharger, filter, prof. Sony hard carrying case, mint cond, only used 1 wknd, \$550 or bst. Steve, dorm x5-7222.

Ski racks, 3 sets (sm, med, standard) for cars w/ rain gutters, all v gd cond, keys incl, best offer for any or all. Call 566-1323 lv mssg.

Magnum Acoustic guitar w/case, \$60. Jeff 492-5425

Queen sz mattress & boxspring, \$200. Tony x3-3922

Brand new Sony CD compact player Model D-202, still in package, complete w/earphones, a/c adaptor, batteries, charger & your choice of 4 CDs, \$209 or bst (retail \$329). Call 286-3336 lv mssg

Judo Gi, sz 4, \$25; rollerblades & pads, sz 9, \$25; combat boots, black leather, sz 9, \$25; prices negot. Call dorm x5-6691

Game Boy System, incl Game Boy, carrying case, 16 games, game holders, manual, player guide, 2-player cord, 4 rechargeable AA batteries, 2 GB comic books, \$350 or bst. Bill Parkin x3-6506.

Draper Lab Memorial 3-day trip to Montreal, \$169 pp dbl. Norm, Draper x8-3282.

Ski boots, W's sz 9, Alpina, unused. Call 861-9472

Hewlett-Packard Laserjet III, plus hdwr for Mac hookup, like nw, only 1800 pages printed, \$1000 firm. Eric 623-8793.

Futon single bed w/cover, \$100. Jan Blair, Draper x8-2843.

Endirons, brass, \$65; 2 leather chrs, Norwegian, \$175 ea; 2 desk chrs, \$25, \$35; 4 teak upholstered sidechairs, new, \$55 ea; misc downhill & x-c equipment. Call x3-3175 or 332-8251

Bassett cherry double/queen-sz headboard & footbd, brand new in boxes (Rolling Estates Collection), \$300 or bst. Thomas Sullivan x3-7287.

## Cambridge OKs CASPAR, **MIT Campus Streets Pact**

#### (continued from page 1)

relations.' We believe that such a new era is not only desirable but within our reach.'

At the March 1 City Council meeting, Councilors Myers, Wolf, Russell and Mayor Reeves publicly praised Dr. Vest and MIT. "The offering of 240 Albany Street by Charles Vest was an important breakthrough," said Councilor Myers.

"MIT has a marvelous president in Charles Vest. And that is really something!" said Mayor Reeves.

Councilor Timothy Toomey of East Cambridge, who urged that the vote be delayed until March 15, voted against the proposal.

Ronald P. Suduiko, assistant to the president, said. "I'm proud of MIT and the community leaders for forging a solution to this difficult problem. ... I'm pleased to have worked with people to bring this to a successful conclusion."

In exchange for MIT's public service of building the CASPAR facility on MIT land and leasing it to CASPAR for \$1 a year for a 20-year renewable lease, (1) the City will transfer ownership to MIT of the campus segment of Amherst Street west of Massachusetts Avenue; (2) MIT will lease the sidewalks of Vassar Street west of Massachusetts Avenue to Audrey Street at the Westgate apartments for landscaping and a bikeway easement, change the parking arrangement from diagonal to parallel parking, and maintain the present two 12-foot automobile lanes; (3) MIT will lease Carleton Street with an easement for a combination of two pedestrian bridges and/or tunnels; (4) MIT will lease Hayward Street with an easement for either a pedestrian bridge or a tunnel, a pedestrian walkway, and closing of the street.

MIT will pay the city \$3 a year for the 20-year, renewable leases on Carleton, Hayward and Vassar. The

1987 Honda Accord DX, 100K mileage, automatic, cruise control, AM/FM/cass, a/c, new brakes, exc cond, \$3600 or bst. Ko x3-7465.

#### HOUSING

- Arlington: charming 7-rm Tudor for sale, 3BR, 2b, fin bsmt, spac yd, fplc, hdwd flrs, quiet nbrhd w/ other MIT profs, \$229K. Rick x3-5236.
- Back Bay, Marlborough St: lovely 1BR 3 blocks from Public Garden, 5th fl in quaint bldg w/ quaint elevator, skylts, detailing, best loc in Back Bay, \$750. Kathy x3-4422.
- Boston, St. Botolph St .: studio for rent now, gd connection to MIT via Bus #1 and/or Green Line, \$525/mo all incl, one mo rent free. Call 225-2578
- Jamaica Plain: 1BR, on 3rd fl w/ht, nr Green line & buses, \$500/mo. Call 522-2602
- Newton/Auburndale: 2BR, 1st fl, 2-fam prkg, hdwd flrs, nr T, 12 min to Boston, no pets, Mar 1, \$900+, sec dep. Call 617-332-7152 aftr 6pm.
- NH seacoast: spac cottage at private beach, across st from oceanfront, 4BR, 1b + outside shwr, 3 porches, July 3-31, \$750/wk. Call 933-7165 aftr 6pm

easements will be granted in perpetuity within 60 days on Carleton and Hayward Streets.

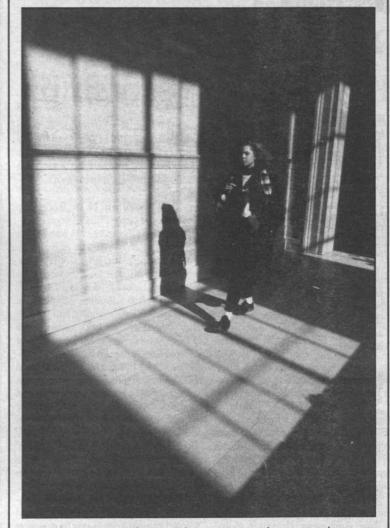
On Vassar Street, the easements will be granted within 20 years or upon MIT's conveyance of an easement on 75,000 square feet of MIT land parcels involved in a 1988 agreement to construct the Waverly Street connector through MIT's property. This agreement includes the eventual demolition of 38 Henry Street, which is currently leased to Polaroid.

Ten persons spoke in favor of the agreement, and eight opposed it. Those favoring the move included two Cambridge residents who work at MIT, Patricia McCosco and Jennifer Combs. Others who spoke in favor included three members of the CASPAR board -Judge Lawrence Feloney, Mr. Brescia, and Bruce Houghton.

Opposing the agreement were a number of Cambridgeport residents, including Bill Cavellini, Cathy Hoffman, Bob LaTremouille, Geneva Malenfant, and Bill Noble.

Bob Boulrice, a Central Square resident who had opposed the previous MIT initiative of siting CASPAR at 380 Green Street, was a member of the CASPAR Siting Committee who spoke in favor of the agreement.

"We truly hope that this is a new day in MIT-City relations," he said.



**PATTERNS**—Diane Hodges, a sophomore in materials science and engineer-ing, walks through Lobby 10 with a slightly *film noir* feeling late one morning Photo by Donna Coveney recently

## Information Highway Consortium

### (continued from page 1)

ther developed, engineered and produced by this country's communications and computer industries."

The test-bed will provide a near "real-world" environment in which network hardware, terminal equipment, protocols, algorithms and services can be rapidly developed, tested and demonstrated.

Alan Kirby, who heads the Digital team, said, "We envision this project being an important step toward providing a very high-performance, flexible network infrastructure that will result in a whole new generation of exciting applications." Mr. Kirby is Digital's Networks Engineering Advanced Development Manager. "In addition to making these new applications economically feasible, the new networks will support existing networking applications and technologies," he said.

In an all-optical network, information is transmitted in optical form from source to final destination, rather than being converted to electronic form for regeneration and switching along the way. All-optical techniques are expected to provide the framework for a large variety of wideband services in more flexible and cost-effective way than can be provided by today's optical networks.

The leader of the AT&T team, Adel A. M. Saleh, said, "The three institutions that are members of the consortium represent a vertically integrated organization with expertise well suited for research and development of wideband optical networks. American global competitiveness in this area is very important and we plan to report to US industry on technological advances by the consortium." Mr. Saleh is head of the AT&T Bell Laboratories Interconnection Research Department.

The grant is jointly managed at DARPA by Bertrum Hui, Defense Science Office, Paul Mockapetris, Computing Systems Technology Office, and Andy Yang, Microelectronics Technology Office.

Mr. Yang said, "The test-bed will not only demonstrate the functional feasibility of this network concept but also test the effectiveness of consortia in fostering technology transfer from laboratory to marketplace."

## **Deutch Appointment Expected**

#### (continued from page 1)

Science Board (1975-91). He was reappointed to the Defense Science Board in 1992. He was a member of the White House Science Council (1985-89). In August of 1990, he was appointed by George Bush to serve on the President's Foreign Intelligence Advisory Board.

Professor Deutch, 54, was born in Brussels, Belgium, July 27, 1938. He came to the United States as a small child with his family and has been a US citizen since 1946. He grew up in Washington, D.C.

### MIT faculty in 1970.

Professor Deutch is a member of the American Academy of Arts and Sciences, the Society of Sigma Xi, Tau Beta Pi and Phi Lambda Upsilon. He is a member of the Trilateral Commission and an Overseer of the Boston Museum of Fine Arts. He has been a member of

the editorial boards of the Journal of Physical Chemistry and the Annual Review of Physical Chemistry.

In 1979, and again in 1980, he was the recipient of the Distinguished Service Medal of the US Department of Energy. He received the Department of State's Tribute of Appreciation in 1980.

### 3 Kennedy Scholars To Attend MIT

Mac SE 1/20 w/mouse, ext keybd & Imagewriter II printer, two 800K disk ports, system 6.04, everything works, askg \$600 or bst. Nan x3-1574.

Dining room set, 6 chrs, table extends to 8', china cabinet & buffet, immaculate cond, \$3K new, askg \$700. Call 489-4353.

Energy-saving portable radiator w/anti-freezing thermostat, only used 1 season, pd \$60, askg \$35. Call x3-6862.

Hiking boots, M's sz 10 1/2, heavy brushed brown leather, Italian-made, EC, \$35; Woolrich parka medium gray, plaid wool lining, M's L, EC, \$45. Tim x3-1670 or 547-0447 lv mssg.

### ANIMALS

Rabbit available free to gd home, 18 mos old, v cute & extra clean, ownr leaving US, all equip incl (cage, water bottle, food, etc). Rob x3-2690 or 776-4512.

#### VEHICLES

1985 Dodge Caravan, brown, FWD, 70K, 2.6L, ps, pb, roof rack, no rust, garaged, v reliable, \$3300 or bst. Bill, Linc x0319.

### WANTED

Vocalist (MIT employee, Wellesley alum) sks musicians for GB gigs (wedding receptions, parties, etc), jazz, lt rock, show tunes, torch songs. Call 433-7114 lv mssg.

### ROOMMATES

Arlington: sk 2F/M to shr 4BR apt, lrg LR/DR/ ktchn, non-smkr, no pets, nr T & Rt 2, avail 4/ 1. \$300+. Call 641-3728.

Inman Sq, Somerville: Roommate wanted to shr apt w/3M, close to Harvard & Central Sq, lease until Aug 31 or longer, \$300+, negot. Marcello or Carlos, 666-4094.

### MISCELLANEOUS

Do you have light or heavy typing to be done at home? If so contact Charlene Gross, E19-429, x3-2776.

Editing, word processing, IBM-PC, 15 yrs MIT experience, theses, papers, etc. Marie x3-3490 or 547-1311.

In 1961 he received both the BA degree in history and economics from Amherst College and the SB (bachelor of science) degree from MIT in chemical engineering through a joint Amherst-MIT program. His graduate work was done at MIT where he received the PhD in physical chemistry in 1965. He has received honorary degrees from Amherst (Doctor of Science, 1978) and from Lowell (Doctor of Philosophy, 1986).

A friend from their graduate school days at MIT is Secretary of Defense Aspin, who received the PhD in economics in 1966.

After receiving his doctoral degree from MIT, Professor Deutch spent a year as a postdoctoral fellow at the National Bureau of Standards in Washington. From 1966 to 1969 he was an assistant professor of chemistry at Princeton University. He joined the

Three graduate students from Britain have received the prestigious Kennedy Scholarships to attend MIT starting this fall.

They are Daniel Andrews, a mathematics major from Oxford; Allan Gray, an electrical engineering, economics and management graduate from Scotland by way of Oxford; and Theresa Hutchings, a hydrologist from Cambridge University who will be joining the Department of Civil and Environmental Engineering.

The Kennedy Scholars are "Rhodes Scholars in reverse," said Professor Richard de Neufville, "in that are selected from the best students from Britain to come to either MIT or Harvard, just as the Rhodes Scholars are chosen from the best students from North America and elsewhere to go to Oxford."

Professor de Neufville, chairman of the MIT Technology and Policy Program, represents MIT on the board of the Kennedy Memorial Trust, succeeding Dr. Paul E. Gray, chairman of the MIT Corporation.

Previous Kennedy Scholars at MIT include Professor Richard K. Lester of nuclear engineering, director of the Industrial Performance Center; Associate Professor Harry West of mechanical engineering; and Assistant Professor Andrew Whittle in civil and environmental engineering.

"The Kennedy Scholars have made significant contributions to MIT over the years, and we welcome the newcomers," Professor de Neufville said.

The Kennedy Memorial Trust, which awards the Scholarships, was established in 1966 by the people of Great Britain as a tribute to the late President of the United States John F. Kennedy. The Trust is also responsible for the upkeep of a memorial at Runnymede, where the Magna Carta was signed.

### MARCH 3, 1993

### NEW BOOK OUT

## Jill Ker Conway to Speak At Women's League Dinner

### By Dee Ippen

MIT Women's League

N oted author, scholar and educator Jill Ker Conway will be the guest speaker at a dinner program, Thursday evening, March18, at the Faculty Club, sponsored by the MIT Women's League and open to the MIT community.

Currently a visiting scholar and professor in the Program in Science, Technology and Society, Conway has also been topping literary best-seller lists since the December publication of the new bookWritten by Herself, an anthology of American women's autobiogaphical writings which she has edited.

The evening event is something of a departure for the Women's League, according to chairwoman Cleo Schimmel. "With so many women working during the day, we wanted to experiment with some evening programs in hopes that these women could attend," she said.

"We're delighted that Professor Conway was able to fit us into her busy schedule right now when her book is front and center with so many of our constituents," she added. A program earlier this year featured Tufts psychologist Zella Luria

Professor Conway became familiar to millions of readers through her acclaimed 1989 autobiograhy, *The Road from Coorain*, about her childhood on a sheep farm on the plains of Australia, tracing her story from her earliest education to her college years at the University of Sydney.

In the early 60's, she left Australia for the United States. She earned her PhD in history from Harvard, then taught for a decade at the University of Toronto, and in 1975 became the first woman president of Smith College, a post she held for ten years, until she came to MIT. Today she holds 26 honorary degrees from universities in the US and Canada.

Throughout her career, women's

education, opportunities and place in society have been at the heart of her work. She was an early and vocal proponent of academic-and compensatory equality for female faculty. At Smith she opened college courses to older women and helped to establish the Society of Scholars Studying Women's Higher-Education History. Her publications reflect these concerns: The Female Experience in Eighteenth- and Nineteenth- Century America (1982), Women Reformers and American Culture (1987), Learning about Women; Gender, Politics and Power (1989). She is currently at work on an intellectual history of modern feminism.

The March 18 program—opening with a 5:30pm social hour, 6:30 dinner and 7:30 talk—is \$25 per person including dinner. Inquiries or reservations may be made by phoning Sis de Bordenave in the Women's League Office x3-3656.



Materials science professor Linn Hobbs grinned as he anticipated getting a carton of popcorn at the kickoff of MITAC's 10th anniversary celebration last month. Photo by Donna Coveney

### PEEER Issues New Calendar

A new publication in bright green ink, The Environmental Calendar, made its appearance on campus last week.

It will be a monthly publication of the Program in Environmental Engineering, Education and Research, listing as many environmental events as are known as of the deadline. The deadline is the 14th of each month.

PEEER is looking for meetings, lectures, seminars, workshops, brownbag lunches, conferences, exhibits anything that is environmentally oriented regardless of departmental affiliation. Future events with details TBA are also acceptable.

The Calendar will be circulated to the faculty and others on the Environment MIT mailing list. To join the mailing list, send your request—and, of course, any listings—to the editors, Rm 3-411F, x3-1357, or fax x3-7402.

# MITAC Names Prize Winners

**S** pecial congratulations are offered to the three grand prize winners of MITAC's tenth anniversary lottery:

Velmer Brooks of the Plasma Fusion Center received the Thomas Cook/ American Airlines Round Trip tickets for two.

Kenneth Donaghey of Physical Plant won the Omni Travel/Northwest Airlines Round Trip tickets for two.

James Pieronek of Lincoln Lab's Group 43 received the MIT Alumni/ae Travel Program's Colonial South Intercoastal Waterway Cruise for two.

Congratulations also go to the following MITAC prize recipients, whose names were chosen February 19 (at Lincoln Lab in Lexington) and February 26 on campus, in the MIT Activities Committee's anniversary celebration.

The February 19th prize winners were:

Elizabeth Andrews, Peter Buehler, James Cappucci, Joanne Chute, Ralph Cook, Denise Cormier, Julie Eastman, Susan Foster, Robert Gates, William Gianci, Robert Grappel, Patricia Grimes, Christopher Harris, Johanna Hayes, David Kassay, Carol Lazott.

Also Denise LeBlanc, Renee Lesperance, Marie McTighe, Judith Mangan, Frank Mucci, Bobba Ratnaleela, Edward Rolfe, Gayle Sherman, Arnold Sheinfeld, Don Sousa, Blanche Staton, Gretchen Sullivan, Diane Valcourt, Vickie Varsos, Stephen Ward, Wendy Weber and David Wynne

The February 26th winners were:

Assarian, Kendra Nicole Borgmann, M. Linda Brown, Priscilla Caissie, Gerbrand Ceder, Robert Clifford, Linda Cuccurullo, Dana DiSanto, Dedek. Randolph Vachiraphorn Lee Finnegan, Susan Fitzgerald, John Foster, Daniel Fouche, Eulogio Gallardo, Jacklene Griffith. Also Elizabeth Kintigh, Elaine Healy, Arlyn Hertz, Dorothy Howells, Gerald Johnson, Philip Lee, Michael Leonard, Barbara Lobbregt, Ping Lee, John McCrillis, Denise Meehan, Ivars Melngailis, Joan O'Brien, James Reinhold, Carol Robinson, Michael Seibert Nancy Viens, Maureen Wolfe and Elizabeth Zubritsky MITAC has prospered thanks to the dedicated efforts of the nearly 100 volunteers who have served on the committee over the past 10 years.

Lease Plimpton who helped with MITAC's 10th Anniversary festivities on campus and at Lincoln Laboratory, and the current committee members who are not only responsible for planning monthly MITAC events, but also have been instrumental in planning the 10th Anniversary Celebration.

They are: Liz Mulcahy, convener; Theresa Auterio; Rose Bella; Mike Clifford; Alice Colby; Judi Donlan; Mary Ann Donofrio; Joan Doucette; Steve Fairfield; Michelle Fiorenza; Terry Heyward; Skip Hoyt; Susie Kendall; Joe Kuchta.

Also Carol Manoli; Laurie McLaughlin; Pat McSweeney; Diane Monahan; Cheryl Nunes; Muriel Petranic; Pauline Phinney; Marion Redonnet; Lynda Reeder; Pat Russo; Karen Shaw; Marianne Taccini; Diane Betz Tavitian; Carrie Young.



Dr. Elizabeth J. Garrels, associate professor of Spanish in the Foreign Languages and Literatures Section, has been awarded the \$20,000 1993 Levitan Prize in the Humanities, Dean Philip S. Khoury of the School of Humanities and Social Science has announced.

Professor Garrels, a leading scholar of Latin American literature, will use the prize money to continue her research on *The Rhetoric and Paternalism: A Study of Samiento's Facundo*. She received her doctorate from Harvard University in 1974 and has been at MIT since 1979. Her publications include *Las grietas de la ternura: Nueva lectura de Teresa de la Parra* (1987) and *Mariátegui y la Argentina: Un caso de lentes ajenos* (1982).

The prize was established through a gift from James A. Levitan, a 1945 MIT graduate in chemistry, a member of the MIT Corporation and a senior partner in the New York City law firm of Skadden, Arps, Slate, Meagher and Flom. The prize, first awarded in 1990, supports innovative and creative scholarship in the humanities by faculty members in the School of Humanities and Social Science. Previous recipients were Dr. Joshua Cohen, professor of philosophy and political science; Dr. Barry R. Posen, professor of political science; and Dr. Peter C. Perdue, associate professor of history and head of the History Section.

lidification, including macrosegregation, dendritic solidification, dendritic coarsening, eutectic solidification and rheocasting, which had a major fundamental and practical impact on the field."

Dr. Fleming's research and teaching concentrate on the engineering fundamentals of solidification processing and on innovations in materials processing operations. He is author or co-author of 250 papers, 26 patents and two books in the fields of solidification science and engineering, foundry technology and materials processing.

Three MIT students are among 25 college students nationwide awarded more than \$250,000 in scholarships from Microsoft Corporation. The scholarships, a number of which are targeted to students of promise among underrepresented minority groups, help educate and encourage students to pursue technically oriented degrees leading to opportunities in the computer industry. The MIT recipients: Giovanni M. Della-Libera, a sophomore in computer science from Miami, FL, \$25,000 Microsoft Minority Scholarship. He was a member of the American Computer Sciences League national team, and was captain of the calculus team in high school. David L. Harris, a junior in computer science from Ridgecrest, CA, \$10,000 Microsoft Technical Scholarship. He has published software and won first place in the Junior Basic Programming Division in 1987, the Judges' Choice Senior Division in 1988, and the Senior Basic Programming Division in 1989. Mark E. Walters, a freshman from St. Thomas, V.I., \$25,000 Microsoft Minority Scholarship. He is a member of the Computer Hackers Association and the Science and Technology Club.



### SQUASH

The squash team returned from last weekend's National Intercollegiate Squash Racquets Association (NISRA) tournament with both recognition and hardware. Senior Matt Trevithick of Toronto, Ontario, was selected to the All-America team. Trevithick, who played in the number one position all year for the Engineers, is only the second All-America in the history of the MIT program. As a team MIT won the Barnaby Award as the most improved team in the country. The squad finished the season ranked 14th nationally, a leap of eight spots from 1992's ranking of 22nd.

#### BASKETBALL

Freshman basketball player Keith Whalen has been named a first team Constitution Athletic Conference All-Conference selection. Whalen, a native of Londonderry, NH, led the Engineers in both scoring and

rebounding and was the only first-year player on either the first- or second-conference team. Whalen also set the MIT freshman record for points scored, tallying 389 points over the course of the season. His mark breaks the record of Mike McElroy '87 who totaled 330 points in 1983-84.

### **TRACK & FIELD**

Pole vaulter Matt Robinson and weight man John Wallberg were the only two Engineers to score points in last weekend's All-New England Track Championships. Robinson, a junior from Olympia Falls, IL, placed second in his event with a vault of 15'7". Wallberg, a freshman from Thief River Falls, WI, finished sixth in the 35-lb. weight throw with a toss of 51 feet. Freshman Matt Sandholm of Helena, MT, set an MIT freshman record in the 55-meter dash with a clocking of 6.59 seconds but did not place in the meet.

### **GYMNASTICS**

Gymnast Julie Lyren finished third in the Eastern College Athletic Conference Division III Championship held last weekend at SUNY-Brockport. Lyren, a senior from Akron, OH, totaled 35.25 in the allaround. First-year student Janet Sollod of San Francisco, CA, finished in a tie for ninth with an all-around score of 33.45. The score is a personalbest performance by Sollod. As a team the Engineers finished sixth.

Roger Crosley

Special thanks to Diane McLaughlin, Dick Caloggero, and

### It's a Fact

The first human-made gene fully functional in a living cell was synthesized in 1976 at MIT by a group led by Nobel laureate Har Gobind Khorana. Dr. Merton C. Flemings, Toyota Professor of Materials Processing and head of the Department of Materials Science and Engineering, has been named to receive he Minerals, Metals and Materials Society's 1993 Bruce Chalmers Award, presented for outstanding contributions to the field of solidification science.

Dr. Flemings was cited for "original, pioneering contributions to so-

## Lhstitute Calendar

\* -Open to public \*\*-Open to MIT community only \*\*\*-Open to members only

### March 3 - 14, 1993

### SPECIAL INTEREST

The Policy Process\*\*—Mar 10: By Dr. John H. Sununu '66. Distinguished Alumni/ae Lecture Series, sponsored by the Dept. of Mechanical Engineering, 4-5pm, Rm 9-150.

MIT Figure Skating Exhibition\*—Mar 13: Presented by the MIT Figure Skating Club/ Ice Dance Club, 7:30pm, Ice Rink in Johnson Athletics Center. Skaters of all levels will be featured; group, single and pairs performances. Free. Dress warmly.

### SEMINARS & LECTURES

#### WEDNESDAY, MARCH 3

- Development of Diode Pumped Solid State Lasers for Applications in Lidar\*—James Harrison, Schwartz Electro-Optics. EECS/ RLE Seminar Series on Optics and Quantum Electronics, 11am-12pm, Rm 346-428. More info: x3-8504.
- The Disposition of Plutonium from Nuclear Weapons\*—Marvin Miller, MIT. MIT Defense and Arms Control Studies Program, CIS, 12-2pm, Rm E38-714. Bring a bag lunch, beverages provided.
- Reinforcement Learning Using Dynamic Programmin: Finding Constraints to Make it Computationally Possible\*\*—Dr. Christopher Atkeson, MIT. Center for Biological and Computational Learning Seminar Series, 12-1pm, Rm E25-401.
- The Structure of an Ekman Spiral in the Presence of Waves and Roll Convection\*\*--Anand Gnanadesikan, MIT-WHOI Joint Program. Oceanography Sack Lunch Seminar, 12:10pm, Rm 54-915.
- NASA Space and Aeronautics Research\*—Dr. Leonard Harris, NASA Chief Engineer. Aeronautics and Astronautics Departmental Seminar, 3pm, Rm 37-252 (Marlar Lounge).
- Chemical Amplification Mechanisms, Novel Chemistry and Strategies for Imaging\*--Dr. Elsa Reichmanis, AT&T Bell Labs. Polymer Seminar sponsored by the Program in Polymer Science and Technology, 3:30pm, Rm 66-360.
- A Gas Target Neutron Source\*\*—Erik Iverson, MIT. RST Doctoral Seminar, R. Lanza and L. Lidski, Nuclear Engineering Dept., 3:45pm, Rm 24-115. Refreshments will be served.
- Spatially Extended Non-Equilibrium Problems in Geology and Geophysics\*\*-Prof. Donald Turcotte, Cornell Univ\*\*-EAPS Department Lecture Series, 4pm, Rm 54-915. Refreshments, 3:30pm, Ida Green Lounge.
- Wavelets, Sampling, and an Auditory Model\*— Prof. John Benedetto, Univ. of MD. Wavelet Seminar, sponsored by the Dept. of Mathematics, 4pm, Rm 2-105. More info: x3-3664 or <heil@math.mit.edu>.
- MIT Initiatives on the Global Environment\*\*-Prof. Mark S. Wrighton, Provost and

- Financing a New Boston Garden\*\*—G. Gail Edwards, Delaware North Co., Inc. Center for Real Estate Rose Lunchbox Series, 12:30-1:30pm, Rm W31-301. Series open to all MIT graduate students and faculty, and all alumni and members of the CRE.
- Order and Chaos in Beat Excited Plasma Waves\*\*-Dr. Wim Leemans, Lawrence Berkeley Laboratory. MIT-EECS Special Seminar, 3pm, Rm 36-261.
- 'Global' Overview of Operations Research for Airlines\*—Lorraine Lotosky, Director, Operations Research Dept., US Air. Operations Research Center and Decision Sciences Program Seminar Series, 4-5pm, Rm E40-298. Coffee, tea and cookies follow, Rm E40-106.
- Fuel Effects on Engine Throttle Transients\*— Jean-Charles Bossert, Graduate Research Asst. Sponsored by the MIT Sloan Automotive/Reacting Gas Dynamics Laboratories, 4:15-5:15pm, Rm 3-343. Refreshments, 4pm..
- Heating and Studying the Vacuum\*\*—Prof. Wit Busza, MIT. Physics Colloquium, 4:15pm, Rm 10-250. Refreshments, 3:45pm, Rm 26-110 (Compton Rm).
- The Great Leap Forward: When and How Did Humans Become Different from Animals\*—Jared Diamond, UCLA Medical School. Fourth Annual Whitehead Postdoc Night, 7:30pm, Whitehead Auditorium.

#### FRIDAY, MARCH 5

- Computational Fluid Dynamics on the CM-5\*—Dr. Rich Shapiro, Thinking Machines, Inc. Computational Aerospace Sciences Laboratory, 12pm, Rm 33-206. Refreshments.
- Micro-Automation: The Challenges and the Future\*—Prof. Ilene Busch-Vishniac, Univ. of TX at Austin. Mechanical Engineering Seminar, 3pm, Rm 3-370.
- Computer Models of Convection in the Earth's Mantle\*—Dr. Gary Glatzmaier, Los Alamos National Laboratory. EAPS Department Lecture Series, 4pm, Rm 54-915. Refreshments, 3:30pm, Ida Green Lounge.
- Spin Fluctuations in the Copper Oxides\*—Prof. Robert J. Birgeneau, MIT. Sponsored by the Center for materials Science and Engineering, 4pm, Rm 9-150. Refreshments, 3:45pm.

#### MONDAY, MARCH 8

- Iron, Redox, and RNA: Solving the Dilemmas of a Toxic Nutrient\*\*-Sponsored by the Dept. of Chemistry, 1:30pm, Rm 1-190.
- Mean and Fluctuating Wall Shear Stress Measurements (Pt 1) and Fluid-Loaded Elastic Slab Undergoing Line and Point Load Excitations (Pt 2)\*\*—Yüksel Gür, MIT. Doctoral Thesis Defense, committee: Prof. Patrick Leehey, chrmn; Prof. Rohan Abeyaratne, Prof. Anthony Patera, 1:30pm, Rm 1-114.
- Nonlinear Dynamics of Viscoelastic Flows in Complex Geometries\*—Prof. Gareth McKinley, Harvard Univ. Fluid Mechanics Seminar Series, 4-5pm, Rm 5-234.
- The Ghost of the Executed Engineer: Technology and the Fall of the Soviet Union\*--Loren R. Graham, MIT. Dept of Electrical Engineering and Computer Science Colloquium Series, 4-5pm, Rm 34-101. Refreshments, 3:30pm.
- Fractal Landscapes in Physics and Biology\*— Prof. E. Stanley, Boston Univ. Applied Mathematics Colloquium, 4pm, Rm 2-105. Coffee/tea, 3:45pm, Rm 2-349. More info: x3-3661 or x3-2688.

#### TUESDAY, MARCH 9

Selectivity, Sensitivity, Speed and Sub-Doppler Resolution are not Incompatible\*— Michael McCarthy, Harvard Univ. Seminaron Modern Optics and Spectroscopy, sponsored by George R. Harrison Spectroscopy Laboratory, Research Laboratory of Electronics, Schools of Science and Engineering, Plasma Fusion Center and Industrial Liaison Program, 11am-12pm, Rm 37-252.

- Mixer Ejector Noise Suppressors\*\*—Prof. W.M. Presz, Western New England College. Sponsored by the Gas Turbine Laboratory, Dept. of Aeronautics and Astronautics, 4:15pm, Rm 16-134. Refreshments, 4pm.
- "On His Work"\*—Juha Leiviskä, architect, Helsinki. Department of Architecture Lecture. 6:30pm, Rm 10-250. More info: x3-4411.

#### WEDNESDAY, MARCH 10

- High Resolution Optical Reflectometry Using Short Coherence Length Light Sources\*\*— Eric A. Swanson, Lincoln Laboratory. EECS/RLE Seminar Series on Optics and Quantum Electronics, 11am-12pm, Rm 34-401B. More info: x3-8504.
- India's Defense Policy\*-V.S. Arunachalam, Sr. Visiting Professor, Carnegie Mellon Univ. MIT Defense and Arms Control Studies Program, CIS, 12-2pm, Rm E38-714. Bring a bag lunch, beverages provided.
- On the Formation and Evolution of Sand Ridges on the Continental Shelf\*\*-Dr. Juan Restrepo, Argonne National Laboratory. Oceanography Sack Lunch Seminar, 12:00pm, Rm 54-325.
- Molecular, Macromolecular and Supramolecular Liquid Crystals with Complex Architecture\*—Prof. Virgil Percec, Case Western Reserve Univ. Polymer Seminar sponsored by the Program in Polymer Science and Technology, 3:30pm, Rm 66-360.
- Optical Pumping of ESR Transitions in Yb<sup>3+\*\*</sup>-S. Ramanathan, MIT. RST Doctoral Seminar, P. Phillips, Nuclear Engineering Dept., 3:45pm, Rm 24-115. Refreshments will be served.
- 3D Shape Description of Brain Ventricles\*\*— John Martin, MIT. RST Doctoral Seminar, A. Pentland, Nuclear Engineering Dept., 3:45pm, Rm 24-115. Refreshments will be served.
- Does Young Subducted Lithosphere Melt?\*— Prof. Marc J. Defant, Univ. of So. Florida. EAPS Department Lecture Series, 4pm, Rm 54-915. Refreshments, 3:30pm, Ida Green Lounge.
- Innovative Methods for Analysis of International Pollution Rules and Regulations\*\*— Prof. Karen Polenske, MIT. Part of the Faculty Seminar on Global Environment and Sustainable Development, 4-5:30pm, Rm E53-482.

The Policy Process\*\*-See Special Interest, above.

- Public Rituals, Memory, and the Transfer of Power in Post-socialist Hungary\*—Susan Gal, Rutgers Univ. Peoples and States: Ethnic Identity and Conflict, CIS, 4:30-6:15pm, Rm E38-714. Refreshments. More info: x3-3065.
- The Export Challenge\*—Speaker: Jack Rennie, Pacer Systems, Inc. Sponsored the the Enterprise Forum, 6pm. Case Presentation, Termiflex Corporation, 7:30pm. Rm 10-250. Registration, 5:30pm. More info: x3-8240.

#### THURSDAY, MARCH 11

- Dominant Designs, Eras of Ferment and Industry Exits: A Longitudinal Study of the American Cement (1888-1980) and Minicomputer (1958-1982) Industries\*\*— Michael Tushman, Columbia Univ. School of Business. Sponsored by the International Center for Research on the Management of Technology, 12-1:30pm, Rm E51-032. More info: x3-0586.
- International Real Estate Investment by Pension Funds\*\*—Blake Eagle, President, Real Estate Consulting Group, Frank Russell Co., Tacoma, WA. Center for Real Estate Rose Lunchbox Series, 12:30-1:30pm, Rm W31-301. Series open to all MIT graduate students and faculty, and all alumni and members of the CRE.
- Architecture-Independent Parallel Programming Support in FORTRAN D\*—Prof. Ken Kennedy, Rice University. Laboratory for Computer Science Distinguished Lecturer Series, 3:30pm, Rm 34-101. Refreshments, 3:15pm.

in Cell Signalling\*—Michael Resnick, Nat'l Institute of Environmental Health Sciences. MIT Dept. of Biology Cell and Molecular Biology Seminar, 12pm, Whitehead Auditorium.

- Superfine Particle Technology\*—Prof. Sheldon Friedlander, Univ. of CA/LA. Chemical Engineering Seminar Series, 3pm, Rm 66-110.
- Equatorial Super-Rotation in a Slowly Rotating GCM: Implications for Titan and Venus\*—Dr. Anthony Del Genio, NASA Goddard Institute for Space Studies. EAPS Department Lecture Series, 4pm, Rm 54-915. Refreshments, 3:30pm, Ida Green Lounge.

#### COMMUNITY INTEREST

- Alcoholics Anonymous (AA)\*\*—Meetings every Tues, 12-1pm; Thurs, 12-1pm, Rm E23-364. For info call Alise, x3-4911.
- Al-Anon\*\*—Meetings every Fri, noon-1pm, Health Education Conference Rm E23-297; every Tues, noon-1pm, Rm 1-246; and every Mon, 12-1pm, Lincoln Lab Bldg 1218, Family Support Ctr. The only requirement for membership is that there be a problem of alcoholism in a relative or friend. Call Alise, x3-4911.
- Alcohol Support Group\*\*—Meetings every Wednesday, 7:30-9am, sponsored by MIT Social Work Service. For info call Alise, x3-4911.
- Cancer Support Group\*\*—Meetings every Thursday, 12-2pm, Bldg E51. For those with acute and chronic forms of cancer. Sponsored by the MIT Medical Dept. For information about weekly luncheon meeting, call Dawn Metcalf, Social Work Service, x3-4911.
- Co-Dependents Anonymous (CoDA)\*—Meetings every Thurs, 6:30-8pm, Rm 66-156. Info: Alise, x3-4911.
- Drop-In Playgroup\*\*—Ongoing, daily, Mon-Fri, 9:30-11:30am, Westgate Function Room. Sponsored by the MIT Family Resource Center.
- Eastgate and Westgate Programs\*\*—To obtain a list of programs sponsored by the Family Resource Center at Eastgate and Westgate, call x3-1592.
- Figure Skating and Ice Dance\*\*—Low-cost group lessons for students and other adult members of the MIT community. Bring figure skates and warm clothing to the rink at 9am Saturdays (freestyle); for ice dance refer to the rink schedule board for time of Sat. dance session. Info: Sally 437-3317, 8-10:30am, 12:30-4pm.
- Gay, Bisexual, and Lesbian Employees and Supporters (GABLES) at MIT\*\*—Come to discuss and work on issues ranging from domestic partner policies to gays in the military. Take part in varied cultural, educational, and social activities. For info on upcoming events, call x2-1014. To sign up for the staff lesbigay e-mail lists, send e-mail to <gablesrequest@athena.mit.edu>. If you have questions about GABLES, call Stephen, x3-6736.
- Guide for Foreign National Spouses Seeking Work\*\*-Guides provide information on topics such as American resumes, job interviews, volunteer work, employment agencies, salary negotiation, visa issues, much more. Free information booklets available in Rm 5-106 (International Students Office), Rm 4-105 (International Scholars Office), and Rm 20A-023 (Office of Special Community Services). Reference binders may be used in Rm 12-170 (Office of Career Services); ask for Cathy Taylor.
- Hosts to International Students Program\*— Widen your horizons, enjoy the mutual opening of new cultural doors by becoming a host or host family to an on-campus MIT international undergraduate, graduate or couple. Currently students from Asia and Europe await a host connection. Sponsored through the Office of the Dean for Student Affairs and the International Student Office. Call Kate Baty x3-4862.
- Informal Embroidery Group\*\*-MIT Women's League, 10:30am-1:30pm. Upcoming dates are: Mar 3, 17, Apr 7, 21, May 5,

ing, 12-1:30pm. New members welcome. \$20-\$30 sliding fee per meeting. Pre-registration required, call Judy Osborne, 731-5767.

- Summer Camp Briefing\*\*—Mar 9: Information of area day camps for school-age children. Preregistration required, call x3-1592. Sponsored by the MIT Family Resource Center, 12-1:30pm, location TBA.
- Technology Children's Center\*\*—The only childcare center on the MIT campus has spaces available in all of its programs at Eastgate (half-day and full-day) for children ages 2 yr 9 mo to 5 yr 6 mo. Information: Olga Slocum, Director, x3-5907.
- MIT Toastmasters\*\*-Upcoming meeting: Mar 5. An organization that helps people improve and practice their public speaking skills. 12:14-1:30pm, Rm E19-220. Sponsored by MIT Personnel Office.
- Wives' Group\*\*—Mar 3: "Current U.S. Literature—What's Worth Reading," John Hildebidle, Assoc. Professor of Literature. Mar 10: "How Women and Men Talk to Each Other—A Discussion of You Just Don't Understand by Deborah Tannen," with Suzanne Koons, Lecturer in ESL, MIT and Harvard. Meetings are from 3-4:45pm, Rm 491 Student Ctr. Babysitting in Rm 407. All women in MIT community welcome. Info: x3-1614.
- Working Mothers Group\*\*—Ongoing participant-led meetings monthly on the first Thursday of each month, 12:15-1:30pm, Rm 18-592. For all working mothers in the MIT community. No preregistration required. Cosponsored by the Family Resource Center and the MIT Medical Dept. Contact Debbie Levey, volunteer coordinator for the group, x3-7112.
- Working Parents Group\*\*—Ongoing meetings weekly on Tuesdays, 12:30-1:30pm. Led by Jackie Buck, Social Worker, MIT Medical Department. Cosponsored by the Family Resource Center and the MIT Medical Dept. New members welcome, no fee, preregistration required, call x3-4911.
- Yoga\*—Ongoing yoga classes. Beginner's Hatha, 5:15-6:30pm. Intermediate Iyengar Style, 6:30-8pm. Rm 10-340. Sponsored by the Women's League. For more information contact Ei Turchinetz 862-2613.
- Kundalini Yoga Classes\*\*—Beginners welcome, bring something on which to sit. Meets Fridays at 6pm, Rm 1-132. Sponsored by the VSG (Vegetarian Support Group). More info: Andy Rothstein x3-7154 or <adrothst@athena>.

### HEALTH EDUCATION

- Health Education Service Parenting Programs\*\*—Mar 3: Diapers and Delirium: Care and Comfort for Parents of Newborns. 27 mins. long. Mar 10: Creative Parenting: The First 12 Months. 60 mins. long. Information videos followed by informal discussions. 12-1pm, Rm E23-297. Call x3-1316 or <health@mitvma.mit.edu>for details. Sponsored by the MIT Medical Dept. Health Education Service.
- A Breath of Fresh Air\*\*—Monthly noon-hour reunion and relapse prevention sessions for graduates of the From Smoker to Non-Smoker workshop. No fee. No registration. Call x3-1316 for dates, rooms, times. Sponsored by the MIT Health Education Service.
- Nursing Mothers' Support Group\*\*—First Tues of each month, 10-11:30am and third Wed of each month, 4-5:30pm, Rm E23-297. No fee. No registration. Call x3-2466 for details. Sponsored by the MIT Health Education Service.
- Childbirth Preparation\*\*—Early Pregnancy, Lamaze Childbirth Preparation, and Lamaze Review classes are offered to patients of the MIT Medical Department's Obstetrics Service. Call x3-1316 for details.
- Tape Time for Health\*\*—A free video loan program. Topics include birth, parenting, baby care, smoking cessation, etc. Visit the Health Resources Center to borrow a tape or call x3-

Chairman, MIT Council on the Global Environment. Part of the Faculty Seminar on Global Environment and Sustainable Development, 4-5:30pm, Rm E53-482.

I.S.O. not T.Q.M.\*—Jan M. Kopernicki, manager of Shell Oil Co's Marine Dept. Sponsored by the MIT International Shipping Club, 4:15pm, Rm E52-175. Refreshments.

On Mother Care, Race, and the Colonial State in Indonesia\*—Ann Stoler, Univ. of Michigan. Peoples and States: Ethnic Identity and Conflict, CIS, 4:30-6:15pm, Rm E38-714. Refreshments.

Counting on Non-Euclidean Fingers\*—Brian Rotman, author/mathematician. Conclusion of the "Rise and Fall of Infinity" lectures. Sponsored by the Program in Writing and Humanistic Studies and the Program in Science, Technology and Society, 5pm, Rm E51-218. Info: x3-7894.

#### THURSDAY, MARCH 4

Public R&D and Company Strategies in Europe\*\*—Nicholas Ziegler. Sponsored by the International Center for Research on the Management of Technology, 12-1:30pm, Rm E51-032. More info: x3-0586. Post-Revolution Iranian Oil Policy\*\*-Massood Samii, New Hampshire College. Sponsored by the Center for International Studies, 12-2pm, Rm E38-714. Bring your own lunch, cookies and soft drinks provided. More info: x3-5806.

Brefeldin A: A Tool for Dissecting Molecular Switches in Membrane Traffic\*\*-Dr. Richard Klausner, NIH, 1993 T.Y. Shen Visiting Lecturer. Sponsored by the Dept. of Chemistry, 1:30pm, Rm 1-190.

Sustainable Energy Options for Developing Countries\*-Dr. Mohan Munasinghe, Chief Environmental Economics Division, World Bank. Sponsored by the CIS, 3-5pm, Rm E38-615.

Vortex Breakdown in an Eccentrical Spherical Gap\*\*—Dr. H. Haj-Hariri, Univ. of VA/ Charlottesville. Dept. of Mechanical Engineering Special Applied Mechanics Seminar, 3-4:30pm, Rm 3-370.

Ultra-Deep Submicron Silicon MOSFETs with fT Exceeding 100 GHz\*\*-Ran-Hong Yan, AT&T Bell Laboratories, NJ. MTL VLSI Seminar Series, 4pm, Rm 34-101. Refreshments, 3:30pm. Lecture by Mark Matthews, MIT. Operations Research Center and Decision Sciences Program Seminar Series, 4-5pm, Rm E40-298. Coffee, tea and cookies follow, Rm E40-106.

Women, Ethnics and the State: American Invented Traditions and Their Discontents\*— Michaela diLeonardo, Northwestern Univ. Women and Politics Series, sponsored by the MIT Women's Studies Program, the MIT Political Science Dept., and the Center for International Studies, 4pm, MIT Student Center, 20 Chimneys. More info: x3-8844.

Rate Controlled Constrained Equilibrium Applied to Hydrogen/Oxygen and Formaldehyde/Oxygen Mixtures\*-Djamel Hamiroune, Northeastern Univ. Sponsored by the MIT Sloan Automotive/Reacting Gas Dynamics Laboratories, 4:15-5:15pm, Rm 3-343. Refreshments, 4pm.

#### FRIDAY, MARCH 12

Computational Simulation of Spacecraft Plasma Plumes\*—Mr. Robie SamantaRoy, MIT. Computational Aerospace Sciences Laboratory, 12pm, Rm 33-206. Refreshments.

Genome Stability: A Role for Recombination

**19, June 2, 16.** Meets in the Emma Rogers Room 10-340. Info: x3-3656.

Narcotics Anonymous\*—Meetings at MIT, every Mon, 1-2pm, Rm E23-364 (MIT Medical Dept). Call 569-0021.

ew Overeaters Anonymous (OA)\*—Meets Friday, 12-1pm, Rm E23-364. Only requirement for membership is the desire to stop eating compulsively. Info: Alise, x3-4911.

Parenting Programs\*—Mar 4: Balancing Academic Careers and Family life, for women graduate students, 12-1:30pm, Rm 3-310. Mar 8: Raising Girls, 12-1:30pm, Rm 18-490.
Sponsored by the MIT Family Resource Center. More info: x3-1592 or <jabie@eagle.mit.edu>.

Playgroups\*\*—The MIT Wives Group, now with the cosponsorship of the MIT Family Resource Center, sponsors and provides ongoing support for informal mother-child playgroups. Contact Wives Group, Rm E23-376, x3-1614.

Stepparenting Group\*\*-For stepparents and other live-in partners. Monthly Friday meet-

1316 for a list of titles available.

### SOCIAL ACTIVITIES

Alpha Chi Omega 5th Annual Lip Sync\*--Mar 5: 8pm, Kresge Auditorium. Tickets \$3 in advance, Lobby 10; \$4 at door. All proceeds go to Transition House and the MacDowell Colony.

Toque del Caribe\*\*—Mar 6: Merengue and salsa! In celebration of Hispanic Month, Morss Hall (Walker), 9pm-1am. Tickets available in Museum Shop and Lobby 10, \$5 in advance, \$6 at door. More info: Jeff Gonzales x5-6168.

Ballroom Dance Workshops\*—Mar 7: Samba 1, Foxtrot 2, Tango 4. 1-5:30pm, Morss Hall, Walker Memorial. No experience or partner necessary. More info: x8-6554, 24 hrs.

Chinese Lunch Table. Meets every Tuesday and Wednesday, 12-1pm, Student Center, Private Dining Room, 3rd floor. Bring your lunch and come practice your Chinese speaking. All levels welcome. Sponsored by the Chinese Students Club.

(continued on page 8)



### March at MIT

### **4** Thurs

**Musicians of the Old Post Road** German sacred and secular cantatas by Hasse and Telemann. 12noon, Chapel.

### 4-6 Thurs/Sat

Twelfth Night, or What You Will MIT Community Players present Shakespeare's fantasy. \$7, \$6 MIT community/seniors/children under 12; \$5 MIT/Wellesley students w/ ID. 8pm, Kresge Little Theater. 253-2530

### 5 Fri

### Lunchtime Clarinet

Advanced Music Performance Student Recital by Dianne Ahmann (G), clarinet. Works by Cage, Lutoslawski, Rossini and Debussy 12noon, Killian Hall.

List Center Opening Reception A reception, 5-7pm for three new shows at the List Visual Arts Center (LVAC) through April 17. Artists Miroslaw Balka and Doug Ischar will attend.

Miroslaw Balka: Sculpture. Littleseen in the US, this 34-year old Polish sculptor makes abstract works in hard industrial materials, often containing soft organic materials that evoke the human body in the same way that a bed or a coffin calls up the human form.

Kenneth Goldsmith: 73 Poems. Text on paper compositions combining visual art, poetry, literature, and music. Goldsmith's words and phrases are chosen for their associative and suggestive meanings

Doug Ischar: Orderly. A sitespecific installation dealing with our country's cultural and political climates as they relate to the exclusion of gay men and lesbians from the US Armed Forces. His multi-media installations incorporate photography, film, video and text to examine the stereotypes within our cultural mythology.

Regular LVAC hours: 12-6, weekends 1-5; closed holidays. 253-4680

### 7 Sun

### Joan LaBarbara Concert

Concert to complement Kenneth Goldsmith: 73 Poems exhibition at List Visual Arts Center (see exhibit description 5 Fri above.) 3pm, Bartos Theater. 253-4400

### **Bassoons Plague MIT**

30th Anniversary performance of the Bubonic Bassoon Quartet. Founded in 1962 at MIT by John Miller '64, (Principal bassoonist of the Minnesota Orchestra, below); David Carroll, Crawford Best, Donald Rosenthal. Funded by the Peter De Florez Fund for Humor at MIT. 4pm, Killian Hall.



### 9 Tues

**Architecture Lecture** 'On His Work," by Juha Leiviskä, architect from Helsinki. 6:30pm, Rm 10-250. 253-4411

### **Artist Speaks**

The Center for Advanced Visual Studies (CAVS) presents Keiko Prince speaking on environmental concepts. 7-10pm, W11 (40 Mass Ave). 253-4415

### 10 Weds

Live Jazz No cover; ID required. 8:30-10:30pm, Muddy Charles Pub. 253-5050

### 11 Thurs

### Poetry at MIT

Olga Broumas. Born in Syros, Greece in 1949, she published her first book there in 1967. Her first book in English, Beginning with O, was selected by Stanley Kunitz for the Yale Younger Poets award in 1977. Two later books of poems, Sole Sauvage and Pastoral Jazz were followed by two volumes of translation from the Greek poet and Nobel laureate Odysseas Elytis. She collaborated with Jane Miller on a prose poem, Black Holes, Black Stockings, and in 1989 published Perpetual. 7:30pm, Bartos Theater. 253-7894

### **Ariel Quintet in Chapel**

Claire Nielsen, flute; Emily Gaberman, oboe; Rebecca Leonard, clarinet; Tracy McGinnis, bassoon; Ellen Donohue-Saltman, horn. 12noon, Chapel.

### 11-13 Thurs/Sat

### 11-14 Thurs/Sun

The Merchant of Venice MIT's Shakespeare Ensemble, directed by Kermit Dunkelberg. \$7, \$5 MIT/Wellesley students. 8pm, Student Center Sala de Puerto Rico. 253-2903

### 12 Fri

### **Student Recital**

Advanced Music Performance Student Michael Valdez (G), piano. 12noon, Killian Hall.

Works by MIT Affiliated Artists Compositions by Charles Shadle and Kyle Hoepner. Kyle Hoepner, harpsichord; Charles Shadle, piano, and others. 8pm, Killian Hall.

Symphony Performs Bruckner MIT Symphony Orchestra. David Epstein, conductor. Bruckner, Symphony No. 4. \$1 at the door. 8:30pm, Kresge Auditorium.

### 13 Sat

### Logarhythms Concert

All-student all-male a capella singing group known for harmonies and humor. With the MIT Muses. 7:30pm, Rm 10-250. Scott Rickard, 258-1532

### **MIT Jazz Bands Concert**

MIT Festival Jazz Ensemble (James O'Dell, director), MIT Concert Jazz Band (Everett Longstreth, director). \$1 at the door. 8:15pm, Kresge Auditorium.

### 14 Sun

### Hava Nagilla

17th Annual Israel Folkdance Festival, sponsored by MIT Hillel. Reserved seating: \$10/\$8; senior and group discounts available. 3pm, Kresge Auditorium.Information/ reservations: 253-2982



Marek Zebrowski, Piano MIT Affiliated Artist performs Bach-Bussoni's Chorale Prelude; Mozart's Sonata in C, KV 330; Chopin's Sonata in B Minor, Op. 58. 8pm, Kresge Auditorium.

#### **Off Campus Exhibit Closes**

Santa Monica. 6:30pm, Rm 10-250. 253-4411

### **Environmental Art**

Three thesis graduate students of the CAVS MSVisS program present projects. 7-10pm, W11. 253-4415

### **Poetry Reading**

Eugene Richie reads from his latest collection of poems, American Fresco. 7:30pm, Bartos Theater. 253-6475

### 17 Weds

### Dance Lecture/Demo

Bill T. Jones/Arnie Zane Dance Company (below). Lecture/demonstration by the internationally-known choreographer. Sponsored by MIT Office of the Arts, Harvard Office of the Arts, MIT Dept of Foreign Languages and Literature, Office of Student Affairs, and the Gay and Lesbian Studies Program. Transportation from MIT will be available. 7:30pm, Agassiz House, Harvard University. 253-4003

**Brass/Chamber Chorus** MIT Brass Ensemble, Lawrence Isaacson, director; MIT Chamber Chorus, John Oliver, director. 8pm, Kresge Auditorium.

### **18 Thurs**

#### **Renaissance Improv**

John Tyson, recorder and Jacqueline Schwab, harpsichord. Improvisations on Renaissance songs by Bassano, della Casa, and Rognioni. 12noon, Chapel.

Women's League Dinner Talk Jill Ker Conway (below), editor of Written by Herself. Guests welcome. \$25. Social hour 5:30pm; dinner 6:30pm, Faculty Club. Register at 253-3656



### 18-20 Thurs/Sat

More Merchant 11-14 Thurs/Sun above

### 24 Weds

### Live Jazz

No cover; ID required. 8:30-10:30pm, Muddy Charles Pub. 253-5050

### **25 Thurs**

Spanish Songs of the Renaissance Virginie Landré, mezzo-soprano. 12noon, Chapel. Please call to confirm. 253-2906

### 28 Sun

### **Museum Show Closes**

Inside the Large-Small House: The Residential Legacy of William W. Wurster '17. Designs by the San Francisco Bay area architect who rose to prominence in the 1930s and 1940s. MIT Museum. See below for Museum information.

### **30 Tues**

**Holography Artist Speaks** The CAVS presents holographer Harriet Casdin-Silver. 7-10pm, W11. 253-4415

### March 31

#### **Theater Lecture/Demonstration** Development of character and actor training by Teresa Ralli, leading Latin American actress and member of Peru's Yuvachkani, Artists-in-Residence at MIT. Translated by Rosa Luisa Marquez. 3:30-5:30pm, Student Center Rm 407. 253-4003 or 253-5623

### All Month

### **MIT Museum**

Ongoing Exhibits: MIT/CASEY; Crazy After Calculus: Humor at MIT; Doc Edgerton: Stopping Time; Holography: Types and Applications; Light Sculptures by Bill Parker; Math in 3D: Geometric Sculptures by Morton G. Bradley, Jr.; MathSpace.

MIT Museum, 265 Mass Ave. Hours: Tues-Fri 9-5, Sat-Sun 1-5. Requested donation: \$2. 253-4444

### **Compton Gallery**

The Hudson Studio: BOULEVARD/ MANHATTAN (detail below). Located off Lobby 10. Weekdays 9-5. Information: 253-4444



MIT TECH TALK

### 6 Sat

#### **Gallery Talk**

Informal talk by artist Miroslaw Balka. 2pm, List Visual Arts Center. 253-4680

#### **Another Artist Speaks** Doug Ischar presents informal gallery talk. 3pm, List Visual Arts Center. 253-4680

#### **MIT Chamber Orchestra** Steven McDonald, director. Hindemith's Five Pieces for Strings, Op. 44; Faure's Incidental Music to Pelleas et Melisande; Mendelssohn's Symphony No. 1 in C Minor. 8pm, Kresge Auditorium.

"Women Making Scenes" Shakespeare sonnets and scenes performed and directed by a cast of 16 women. 8pm, Kresge Rehearsal Room B. Katie Leo, 225-8175



Edward McCluney, Director, Student Art Association is part of a group show entitled: African American Perspectives: The Lois Foster Exhibition of Boston Area Artists at the Brandeis University Rose Art Museum, Waltham. Tues-Sun 1-5pm, Thurs 1-9pm. 736-3434

### 15 Mon

### Novelist Isabel Allende

1993 William L. Abramowitz Lecture by Isabel Allende, bestselling author of The House of Spirits, niece of the late Chilean President Salvador Allende. 8:30pm, Kresge Auditorium. 253-4003

### 16 Tues

### "Cheap Thrills"

Architecture lecture by Julie Eizenberg, MIT, architect from

### 18-3 Thurs/Sat

Alum Playwright Off-Campus Itchin' for It by Owen Doyle '84 presented by Cicatrix Theatre Company. 8pm, Charlestown Working Theater, 442 Bunker Hill St., Charlestown. 242-3285 or 666-8443

### 19 Fri

#### **Student Art Awards Deadline** Louis Sudler Prize - for seniors, presented for excellence in music, theater, painting, sculpture, design, architecture, or film. Laya and Jerome B. Wiesner Awards - two presented to students, living groups, organizations, or activities for achievement in the creative or performing arts. Send nominations to Mark Palmgren, E15-205. 253-2372

#### Strobe Alley Edgerton/Mili Photography Contest Prize Winners. 4th floor of Bldg 4. 253-4444

### Hart Nautical Gallery

A Thousand Years of Voyages of Discovery — Exploring the Ocean from Surface to Seabed; Boston Fisheries 1900-1920. 55 Mass Ave. Weekdays 9-8. 253-5942

All events are free unless prices are noted. All concerts: 253-9800 unless otherwise noted MIT Arts Hotline: 253-ARTS Month-at-a-Glance is produced by the MIT Office of the Arts (253-4003) and ARTSNET. Celia Metcalf, design; Liz Ferry, production.

## Notes from the Lab

### A TEST FOR WATER-BORNE PATHOGENS

Every year in the US hundreds of thousands of people come down with gastroenteritis, diarrhea and other uncomfortable conditions because they were exposed to water-borne disease organisms.

Many of these people were exposed to the pathogens through eating contaminated shellfish or swimming in polluted areas. Public health officials would love to test for the critters and warn off unwary swimmers or close shellfish fishing areas, but they can't. Most of the culprits don't show up in standard tests.

Enter Richard Lewis, a graduate student in civil and environmental engineering. Mr. Lewis is designing a new test to detect these organisms. The method, which is relatively

cheap and fast, relies on a technique of molecular biology: polymerase chain reaction (PCR). In PCR enzymes are used to greatly amplify DNA present in a water sample. If DNA from pathogens of interest is present, PCR will produce enough that it can be easily detected.

In addition to great sensitivity-PCR can theoretically detect a single DNA chain in solution-the technique also allows researchers to test for multiple pathogens in one test tube

PCR is not yet ready to move from the lab to the beach, but Mr. Lewis can see the day when kits will be available so any public health agency can test for these currently hidden germs.

### SOLVING LINEAR PROGRAMS "FASTER THAN EVER"

For the past four years Robert M. Freund of the Sloan School has sought to develop algorithms for solving linear programs "faster than ever" and to understand their underlying mathematics more deeply.

Although the topic of linear programming may seem esoteric, its implications for the management sciences are, in fact, vast. Linear programming problems and models are pervasive in most economic and scientific endeavors: manufacturing companies use the models to determine production scheduling, capacity expansion and crew scheduling; airlines use them for flight planning and crew scheduling; telecommunications firms use optimization models to configure and design their networks; and scienquence structures.



### WEAK ELECTRIC FIELDS AND LIVING CELLS

Weak electromagnetic fields may, indeed, be able to cause responses in living cells, according to a physical model that two investigators have been working on.

Dr. James C. Weaver of MIT at the Harvard-MIT Division of Health Sciences and Technology is leading this work. The model shows that the smallest electric field effect that is not overwhelmed by ever-present thermal noise may be small (~10-4 V/cm).

This theoretical estimate does not prove that cells respond to low level fields, but only that one common conceptual objection (the thermal noise limit) does not rule out lowlevel effects. Other types of noise in a biological cell's environment may be larger than thermal noise, and therefore predict a larger minimum field.

For this reason, the researchers' model does not make predictions concerning the long and heated controversy about possible biological effects of power lines, household wiring, and ordinary electrical appliances.

This column features summaries of MIT research drawn from several sources. If you have an item to suggest, send it to Elizabeth Thomson, Rm 5-111, or <thomson@mit.edu>.

#### A letter has given an annual award to the Clinton/Gore Presidential Campaign for its effective use of the Presidential Campaign Information Service developed at the MIT Artificial Intelligence Laboratory. The award, called the EMMSy

SYSTEM DEVELOPED AT MIT

(after TV's Emmy), is the only one in the industry based on votes by the peers of e-mail users and vendors, the newsletter's announcement said.

morning

The multi-party non-partisan information service was initiated at the AI Lab in mid-October as an experiment to study how electronic mail and the INTERNET national computer network could disseminate full-text campaign information and facilitate informed public discussion.

The MIT system was developed by Eric Loeb, a PhD candidate in neuroscience, and John Mallery, a PhD candidate in political science and electrical engineering and computer science

WHEREFORE ART THOU?—A pensive soul leans on the balcony above Lobby 10 watching the people pass by one recent

Although the newsletter, Electronic Mail and Micro Systems, saluted the Clinton-Gore campaign for making effective use of electronic mail, it omitted mention of the MIT system, which comprised a major element of the campaign's use of e-mail.

Nor did it mention that the system was used by four other presidential campaigns-Bush, Perot, Marrou (Libertarian) and Hagelin (Natural Law)

Why didn't MIT get a mention? The newsletter's advertising firm said the reason was that the ballots distributed to the industry listed only the Clinton/Gore campaign, not the originators of the system the campaign was using.

Working under Clinton staffers George Stephanopolous and Jeff Eller, Jonathan (Jock) Gill of the presidential campaign directed the Clinton/ Gore e-mail effort from Little Rock. MIT researchers involved in the project said Gill ran the "sneaker network" at Clinton/Gore headquarters, collecting campaign materials to transmit via the MIT system, and handcarrying incoming suggestions and questions to relevant staffers.

Gill is now part of the Clinton administration, serving as a special assistant to the President directing electronic publishing and public access e-mail for the White House.

The MIT experiment was implemented on a combination of Lisp Machines and Sun workstations at the AI Lab under the auspices of Professor Patrick H. Winston, lab director. Contributing members of the AI lab included Howard Shrobe, Robert Thau, Paul Viola, Steve Gander, Bruce

Walton, and Sundar Narasimhan. Symbolics, Inc., contributed some services, and Great Eastern Technologies, Inc., provided some memory boards for the server.

Photo by Donna Coveney

According to Professor Randall Davis, associate director of the AI Lab, public participation was open to anyone with network access.

"All they had to do was send electronic mail that was routed through a particular machine here at MIT. Building on a database of persistent objects and automatic processing of digital forms-invented in this experimentthe campaign server provided a number of services over e-mail. They included automatic subscription services to a range of campaign distribution or discussion lists, organized by party and by issue. For example, users could obtain direct feeds on Bushforeign policy, Clinton-economics, Perot-volunteers. Users could also join volunteer groups, organized by state and region, to work on behalf of their favorite candidates.

With the e-mail-based infrastructure in place, the presidential campaigns could send out the full text of press releases, position papers and background reports to its mailing list of interested individuals. Users could also search text-bases of campaign documents to get only those issues of concern to them.

The system also had an automatic surveying facility: it sent out opinion survey forms and could automatically read and tally the results. The campaigns were impressed with the ability to distribute substantive information directly to a large segment of the public, effectively, instantly, verbatim and untouched by media interpretation, as well as the ability to get ideas, suggestions, and reactions from thousands of quite highly educated people scattered around the country, the AI team reported. Mr. Gill's assignment at the White House, Professor Davis said, is "to work from the functionality of the campaign system, then produce the more ambitious technical reality that goes with his new title. Scaling up such a system for White House use will face substantial challenges," Davis said. For example, "How should electronic mailing be processed when potentially every citizen can submit their opinions?" Professor Davis said the AI Lab is currently trying to bring together and coordinate a number scholars and engineers from other universities and private companies to propose some initial designs and identify relevant experts who might assist in constructing the follow-on system.

## **GREAT PICTURE** ILP, Italy Test Videoconferencing

The Industrial Liaison Program and the Italian Telecommunications Study Center and Laboratory (CSELT) got together last week for a half-hour conference at the new PictureTel facility of MIT Video Production Services in Building 9.

The experiment included full duplex simultaneous transmission of audio and video, as well as still video from MIT. Transmission of videotape is also possible.

MIT was broadcasting/receiving through a PictureTel system located at

the Center for Advanced Engineering Study headquarters while CSELT was using a system from an Italian vendor, AETHRA. Communication between the two systems was effected via a bridge supplied by ATT.

The experiment demonstrated the practicality of establishing video/audio links with ILP members distant from MIT. Both sides were elated, and are planning future video links with other research departments and labs at MIT

An advantage of videoconferencing

is the low cost, relative to the cost of an actual visit to or from MIT. Expenses for a videoconference include several components: there is an overhead for the use of the PictureTel system, plus technical assistance. To link with overseas systems, one needs to reserve a conversion "bridge" from a carrier such as ATT, MCI, etc. The cost of the longdistance connection is variable, depending on the distances involved.

Participating from MIT were Professor Shaoul Ezekiel and Richard Noves, director and associate director, respectively, of the Center for Advanced Engineering Study, and Dr. Kenneth H. Goldman, the ILP officer for CSELT.

#### (continued from page 6)

Japanese Lunch Table. Meets Tuesdays at 1pm in Rm 407 and 491 in the Student Center. Bring a lunch and talk with native Japanese speakers. All Japanese speakers, especially beginners, are welcome. Call x3-2839.

La Table Francophone. Meets Tuesdays at 1pm in Walker Memorial Dining Room.

Esperanto Conversation Group. Meets Mondays 7:30-9pm in the SCC Coffeeshop in the Student Center. Sponsored by the MIT Societo por Esperanto. More info: <speak@ athena.mit.edu>.

### MOVIES

Admission to below Lecture Series Committee Movies is \$1.50, and MIT or Wellesley identification is required. For the latest Lecture Series Committee movie and lecture information, call the LSC Movieline, x8-8881.

Mar 5: Death Becomes Her [PG-13], Rm 26-100. & 10pm. Holiday (1938), Rm 10-250, 7:30pm. Mar 6: The Rescuers Down Under [G], Rm 26-100, 3, 7 & 10pm. Mar 7: West Side Story (1961) [unrated], Rm 26-100, 8pm. Mar 12: A League of Their Own [PG], Rm 26-100, 7 & 10pm. Cyrano de Bergerac (1950), Rm 10-250, 7:30pm. Mar 13: Passenger 57 [R], Rm 26-100, 7 & 10pm. Mar 14: The Purple Rose of Cairo [PG], Rm 10-250, 7 & 10pm.

### E LOOKING AHEAD

NSBE Night at the Apollo\*-Apr 2: Amateur competition featuring C.P. Lacey, "Sandman," from Def Comedy Jam and the Apollo, Joe Gray from the Apollo Theater in Harlem. Charity Fundraiser with talent from all over New England, \$500 grand prize, reserve seating, group reservations available. Kresge Auditorium. Tickets \$10, discount to Kappa Alpha Psi party afterwards. Sponsored by the MIT National Society of Black Engineers. More info: Event Organizer Keith Bevans x5-7463; performance registration, Thane Gauthier x5-7438; tickets, Quentin Walker x5-7455.

Send notices for Wednesday, March 10, through Sunday, March 21, 1993 to Calendar Editor Rm 5-111, before 12 noon Friday, March 5.

### Libraries Plan Book Sales

The MIT Libraries' Gifts Office plans to hold three community booksales this spring at various locations on campus.

The first will be in the seminar room at Dewey Library, E53-212, on Thursday, March 4, 10am-3pm, offering titles in political science, economics and management.

In observance of National Library Week, April 19-23, there will be a large booksale featuring a wide range of material in all subject areas. The exact date and location will be announced as soon as arrangements are confirmed.

Finally, the spring season will close with a sale at Rotch Library, on Thursday, May 6, 10am-3pm, focusing on art, architecture, and urban planning. The MIT Libraries Gifts Office's

booksales are open to the MIT community only. They feature library discards and new and used donated books. Excellent buys are to be had in every field of academic study or personal interest. Prices range from \$.25 to \$25 or more, though most items fall into the \$1-\$3 range. There are also free materials in every sale. Proceeds from these sales benefit the MIT Libraries' Preservation Fund.

For more information, watch for announcements in Tech Talk and Athena, and check bulletin boards around campus, or contact the Gifts Office, x3-5693.