Fermi News

The Newsletter of the Fermi National Accelerator Laboratory

STUDENTS AND EMPLOYEES BRAVE COAST EARTHQUAKE

It was different for all of them. For Susan, it was fascinating. Marilyn, however, couldn't wait to leave. David was quite amazed and Jim and Andy just found it to be an inconvenience. It was the January 17, 1994 Southern California earthquake.

Eighteen students and employees from Fermilab were sleeping that morning at a hotel in Century City, California. That day, they were to begin two weeks of classes at the 1994 U.S. Particle Accelerator School on the campus of the University of California, Los Angeles. They didn't make it to UCLA.

At 4:31 a.m. those in the hotel were awakened by one of the strongest earthquakes California has ever felt. It registered 6.7 on the Richter scale. "I was lying in bed thinking this is the strang-

est dream I have ever had," said SU-SAN WINCHESTER FINKS (LS/Accel. School), one of the organizers of the school. "The armoire had fallen over and was laying across my legs and the room was really moving. I wasn't hurt, though, just a little bruise."

The same thing happened to another organizer, MARIJ YN PAUL (LS/Accel. School). "Your body goes into shock to protect you when something like this happens. I tried to get out of bed before the building stopped shaking, but I couldn't. I had to stop and sit down, wait for the building to stop shaking and proceed. We were on the 16th floor. Most of the other school participants were on lower floors. Our rooms were destroyed, but some of theirs had no damage at all. It was very selective."

"It was quite an experience," said DAVID OLIVIERI (AD, visitor, University of Massachusetts). "You could feel the waves lifting you off the ground. Basically, you were moving up and down. It seemed (to last) an eternity. At first, I wasn't sure about leaving. I knew there would be aftershocks, but they would come later, so I grabbed my shoes, my wallet and my work. People were running out in their bathrobes."

After the building was evacuated, everyone gathered along the parkway. The power was off and the sky was black. In the distance, the participants said the only things they could see were the blue flashes of transformers exploding.



Participants in the 1994 Particle Accelerator School: (Row 1, l to r) Bill Pellico, Steve Jerger, Virgil Bocean, Susan Winchester Finks, Darryl Orris, Sal Fahey, Rachid Baiod and Tony Leveling. (Row 2, l to r) Jim Morgan, Andrew Braun, John Marshall, Sathyadev Ramachandran, Rui Alves-Pires, Eric Colby and David Olivieri. Not pictured: Bruce Hanna, Marilyn Paul, Guan Hong Wu.

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Wilson Symposium Schedulepage six

SEXUAL HARASSMENT: WHAT IS IT? WHAT ARE MY RIGHTS?

The issue of sexual harassment is a big concern for many people in business today. As the law continues to define sexual harassment, many people are unsure about what they can or cannot do or say in the workplace.

Fermilab's Wellness Works Committee recently held a noon-time seminar to help employees understand what constitutes sexual harassment and explain what rights they have. DIANNE ENGRAM of the Equal Opportunity Office spoke on the subject and explained Fermilab's sexual harassment policy.

"Not all sexual activity in the workplace is harassment," said Dianne. "There are factors that need to be considered: Was the activity invited? Was it uninvited, but welcomed or was the activity flatly rejected?" The circumstances of the incident also need to be examined to determine if the conduct was sexual harassment: the frequency of the conduct, its severity, whether it is physically threatening or humiliating or merely an offensive utterance and whether it unreasonably interferes with employees' abilities to perform their jobs.

The U.S. Supreme Court has declared sexual harassment as a violation of the 1964 Civil Rights Act, said Dianne. Legally, it is defined as unwelcome sexual advances, requests for sexual favors and other verbal or physical

conduct of a sexual nature when (1) submission to such conduct is made either explicitly or implicitly a term or condition of an individual's employment, (2) submission to or rejection of such conduct by an individual is used as the basis for employment decisions affecting such individual, or (3) such conduct has the purpose or effect of unreasonably interfering with an individual's work performance or creating an intimidating, hostile or offensive work environment.

There are four main types of harassment, Dianne explained. Quid pro quo or coercion is where the situation is "something for something" and involves, for example, a person saying "If you don't do this, you won't get a promotion." Dianne said this type of harassment is generally committed by managers or supervisors. The second type of harassment is the hostile work environment, where innuendoes, vulgar language or sexual jokes make members of one sex feel uneasy. In the third form, favoritism, a supervisor, for example, may choose one person for particular attention. That person receives favorable assignments or pay raises while others in the group are denied those opportunities. The fourth type of harassment is harassment by non-employees. Fermilab's policy holds contractors responsible for their employees' actions, and if they do not abide by our sexual harassment policy, their con-

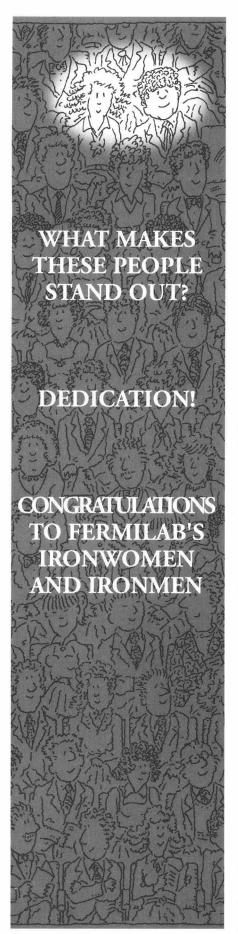
"Not all sexual activity in the workplace is harassment. There are factors that need to be considered: Was the activity invited? Was it uninvited, but welcomed or was the activity flatly rejected?"

—Dianne Engram

Fermilab's policy statement on sexual harassment states that "sexual harassment does not refer to occasional compliments of a socially acceptable nature. It refers to behavior that is not welcome, which is personally offensive, debilitates morale and, therefore, interferes with our work effectiveness. Such conduct, whether committed by supervisors or non-supervisory personnel, is specifically prohibited. This includes: repeated offensive sexual flirtation, advances or propositions, continued or repeated verbal abuse of a sexual nature, graphic or degrading sexual comments about an individual or his/her appearance, or any offensive or abusive physical contact."

Employees who have questions regarding the Fermilab policy on sexual harassment or who feel they may have a complaint of harassment, should contact their supervisors or Dianne directly. She can be reached at x4633. All complaints will be investigated promptly and thoroughly.





EMPLOYEES HONORED FOR NO SICK TIME

THE FOLLOWING 99 WEEKLY EMPLOYEES WERE RECENTLY GIVEN 1993 IRONWOMAN/IRONMAN AWARDS. THE IRONWOMAN/IRONMAN AWARD RECOGNIZES THOSE EMPLOYEES WHO HAVE LOST NO TIME TO SICK LEAVE DURING ONE CALENDAR YEAR. THE DEDICATED EMPLOYEES ARE:

ACCELERATOR DIVISION:
GEORGE ATHANASIOU,
MICHAEL BARBOR, LARRY
DEROO, BRIAN DRENDEL,
RYANHAGLER, DANHELLBERG,
GLENN JOHNSON, STANLEY
JOHNSON, THOMAS MILLER,
JAMES MORGAN, DENTON
MORRIS, PHILIP PAUL, JOHN PETERS, JOAN ROCK, FRANK
SCHNEIDER, LLOYD SHEPARD,
TODD SULLIVAN, FORREST
WHITE AND BERNARD WISNER.

BUSINESS SERVICES SECTION: ANN ARNOLD, DAVID BUNDY, WALTER BIRD, GEORGE CROWELL, CHRISTOPHER HIRNER, FRANK JACKSON, ROY PARKER, DAVID SEIFERT, EARL SHAFFER, RAY SOLFISBURG, GEORGE SMITH, WILLIAM STEARNS, SYLVIA TREVINO AND CARL WHEELER.

COMPUTING DIVISION: JEFFRY ANDRESEN, WILLIAM BARKER, RICHARD KWARCIANY, YOLANDA VALADEZ AND RICK VAN CONANT.

ENVIRONMENT, SAFETY AND HEALTH SECTION: DARREL BANCROFT, STEVE CARRIGAN, THOMAS GOLASZEWSKI AND DAVID HOCKIN.

FACILITIES ENGINEERING SERVICES SECTION: ANDREW AUERSCH, MICHAEL BECKER, JAMES KALINA, JOHN PRATSCHER AND DONALD TOKARZ.

LABORATORYSERVICESSECTION: CHERYL BENTHAM, SEAN CAN-NON, SHEILA COLSON, SUSAN HANSON, BRADLEY KOBIELLA AND JAMES SZYPLIK.

PHYSICS SECTION: EUGENE BECK, HARVEY BRUCH, ED-WARD FRAZIER, ANDREW LATHROP, BRIAN LAVOY AND LISA CHEN-TOKAREK.

RESEARCH DIVISION: DEAN ARVESON, STEPHEN BAGINSKI, JOHN BUCKLEY, CUTCHLOW CAHILL, GREGORYCISKO, PETER CROSS, GERALD DYCHAKOWSKY, DONALD EMMONS, DALLAS HEIKKINEN, MICHAEL HENES, KELLY KNICKERBOCKER, KEVIN KUK, CHRISTOPHER MCBRIDE, MICHAEL MCGEE, KERRY MELLOTT, BRUCE MERKEL, MICHAELO'BOYLE, RICK PIERCE, ANDREW ROMERO, MARK SHOUN, ARMSTARD WALDON AND RONALD WILLIAMS.

TECHNICAL SUPPORT SER-VICES SECTION: HOWARD BLAIR, LARRY CHIPLIS, WAYNE ECKERT, WILLIAM GATFIELD, IMRE GONCZY, STEVEN HELIS, ROGER HILLER, FILIP JOHNSON, MALY, ROBERT DANNY MASSENGILL. **RAYMOND** MEISNER, STEPHEN MERKLER, WILLIAM MUMPER, RICHARD REBSTOCK, JAMES REED, MARK RUSCHMAN, IVAN STAUERSBOLL AND DEAN VALIDIS.

People

RON FAST RETIRES

RON FAST, a long-time employee in R D / M e chanical Support, retired from the Laboratory Febru-



ary 28. Ron began working at Fermilab on March 3, 1969 in the Experimental Facilities Department, which later became the Research Division.

Ron said, "I really enjoyed the intellectual challenges of my 25-year career at Fermilab, but it is now time to move on to another place and other challenges." Ron and his wife will be moving to Tucson, Arizona in March, where they will "thaw out from Illinois winters, enjoy year-round bicycling and hiking and explore the 48th state. We hope to return to Israel, 'cathedral hop' in England and visit Hawaii," Ron said.

LECTURE SERIES

THE ECOLOGY OF COMMERCE

Paul Hawken, author and co-founder of Smith & Hawken, Friday, March 18, 1994 at 8 p.m., Ramsey Auditorium.

"How can the world of commerce, cur-

rently at odds with ecology, be transformed for the better? A sincere and authentic voice provides profound insights..." states Dr. Thomas E. Lovejoy of the Smithsonian Institution in regard to author, entrepreneur and environmentalist Paul Hawken. Hawken's latest book, The Ecology of Commerce, is a blending of successful entrepreneurship and philosophical discipline, and serves as the basis for his lecture at Ramsey Auditorium.

Paul Hawken's call for an economy modeled on a mature ecosystem, where the waste from one process serves as the fuel for another, is drawn from his experiences both as a widely successful entrepreneur and as one who has a deep moral responsibility to the environment. His ideas have met with much critical acclaim and respect from both the business and environmental factions.

Admission is \$3. For information or reservations, call xARTS weekdays between 9 a.m. and 4 p.m.

DICK AUSKALNIS

DICK AUSKALNIS, head of Purchasing since 1968, retired March 4. He joined the Lab in April 1968, work-



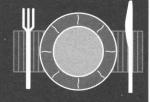
ing in the original Oak Brook offices.

"I was here for 26 years," said Dick. "It's been a career and I am proud of the things that were accomplished. I'm proud of the (Purchasing) staff and the succession of people I reported to: Paul Reardon, Rich Orr, Dick Lundy, Bruce Chrisman, Ken Stanfield and Jim Finks. Jim has been very supportive. It was a very gratifying experience."

In retirement, Dick plans to work occasionally with the National Association of Purchaing Mangement, of which he is a member, and help area junior colleges with their procurement assistance programs. He also plans to play golf — something he hasn't done very much of in the last three years.

Chez Leon Menu

Lunch (Wed) \$13.00 • Dinner (Thurs) \$23.50 Reservations: x4512



Wednesday, March 9 • Bouillabaisse w/rouille, garlic bread, fresh greens w/watercress dressing, hazelnut torte w/Frangelico, creme Anglaise

Thursday, March 10 • Sausage calzone w/fennel seeds, grilled jumbo shrimp w/garlic sauce, sauteed multi-colored peppers, radicchio and watercress salad, cinnamon ice cream w/biscuits

Wednesday, March 16 • Onion and rosemary tart, raspberry chicken, wild rice, vegetable of season, cucumber and dill salad, apricot mousse

Thursday, March 17 • Booked

MOVIES

The Fermilab International Film Society presents movies at 8 p.m. Fridays in Ramsey Auditorium. Admission is \$3 for adults, \$.50 for children under 12.

March 11:

Night on Earth. Five vignettes, each taking place in taxi cabs in different countries, reveal a fascinating and entertaining cross-section of modern humanity. Jim Jarmusch, dir., U.S. 1992 (116 min.)

March 25:

Enchanted April. Four British women escape the drabness of their lives by renting a castle in Italy for a month. Life and fantasy exquisitely contrasted. Michael Newell, dir., Great Britain 1992 (107 min.)

PIERCE DIRECTS PLAY

"Resident thespian"
RICK
PIERCE
(RD/
Instrum.)
will be displaying
more artis-



tic talent this month as he directs *White Collar Death in the Pink Collar Ghetto* at the Albright Theater in Batavia. Performances will be shown March 4, 5, 11, 12, 18 and 19 at 8 p.m. and March 13 at 2 p.m.

Over the last two years, Rick has appeared in many Albright Theater Company productions, including *A Christmas Carol, The House of Blue Leaves* and *Bus Stop.* The Albright Theater is located at 101 N. Island Avenue in Batavia.

Summer Daycamp Sessions

Fermilab will again sponsor three supervised daycamp sessions. Children of employees, visitors and Fermilab contractors ages 7 through 12 are eligible. Session dates are June 13-July 8, July 11-Aug. 5 and Aug. 8-Aug. 26.

The program will be held Monday through Friday in the lower level of Kuhn Barn in the Village. Daily programs begin at 8:30 a.m. and run until 5 p.m. Supervision will be available after 7:30 a.m. A \$10 late fee will be assessed per child after 5:30 p.m. for late pickup. Registration is for full days only. The program consists of arts and crafts, sports, field trips and films. Children will bring their own

lunches. Swimming lessons will be held on Tuesdays and Thursdays at a cost of \$15 per session. Registration for daycamp swim lessons is enclosed in the information packet that will be sent following acceptance into the daycamp program.

The fee for sessions 1 and 2 will be \$300 per child/per session and \$225 per child/per session for session 3. A \$100 deposit per child/per session must accompany the registration form. Admission will be made by lottery drawing on March 31. Maximum attendance is 30 children. No credit for sick days, vacation or other absences can be provided.

Name of parent employed at Fermilab:

| MS | Ext | Home | Phone | |
|------------|-----|------|-------|--|
| Name of ch | ild | | | |
| | | | DOB | |
| | | | DOB | |
| | | | DOB | |

(Circle Session(s))

Session 1: June 13 - July 8

Session 2: July 11 - August 5

Session 3: August 8 - August 26

Return form along with deposit to: JEAN GUYER, MS 126, x2548. Make check payable to Fermilab. Once accepted, you will receive an application packet. Deadline for entering this form is March 30, 1994.

No refund of the deposit can be provided for cancellations, unless the opening created is filled by a new applicant or a program has been canceled. No discount for additional children of the same family is available.

SYMPOSIUM TO HONOR DIRECTOR EMERITUS ROBERT WILSON

An international symposium and tribute in honor of Director Emeritus Robert R. Wilson on his 80th birthday will be held today, March 4, 1994, in Ramsey Auditorium. Celebrating an Era of Courage and Creativity will take place from 9 a.m. to 4:30 p.m. All Fermilab personnel are invited to attend, with supervisory permission. The program for the days events follows: Morning Session Chairman, Alvin Tollestrup, Fermilab 9:00 a.m.: Welcome, John Peoples, Fermilab 9:15 a.m.: Golden Ages, Chris Quigg, 10:00 a.m.: Top and B Physics, Paul Tipton, University of Rochester 10:30 a.m.: Coffee Break 11:00 a.m.: Fixed Target, Heidi Schellman, Northwestern University 11:30 a.m.: Even E.O. Lawrence Would be Surprised, Boyce McDaniel, Cornell University 12:10 p.m.: Machine Physics, Gerry Jackson, Fermilab 12:30 - 1:30 p.m.; Lunch break Afternoon Session Chairman, Leon Lederman, IIT/Fermilab 1:45 p.m.: Robert R. Wilson Video The Life of Courage & Creativity, Fermilab Visual Media Services 2:05 p.m.: Wilson's Way, Lillian Hoddeson, Fermilab 2:30 p.m.: Art and Architecture at Fermilab: The Wilson Legacy, Paul Karchin, Yale University 3:00 p.m. Remarks, Jane Wilson 3:20 p.m.: Reflection video, Vicki Weisskopf, Hans Bethe, Glenn Seaborg 3:50 p.m.: Reminiscences, Roy Billinge, Paul Reardon w/contribution from Ned Goldwasser, Martyl Langsdorf, Andy Mravca, Rich Orr, Norman Ramsey, Sanford, Judy Schramm, Maury Tigner 4:30 p.m.: Birthday Cake, Atrium

OH, GO FLY A... DELTA DART

The Fermilab Barnstormers Radio Control Model Club will host their annual Delta Dart Contest at Kuhn Barn on Wednesday March 9, 1994 at 5:30 p.m. All employees are invited.

A delta dart is a small rubber-bandpowered airplane constructed of balsa wood and tissue paper. You can build one of these airplanes in less than an hour and fly it indoors that evening in the Barn for fun and prizes. No experience is necessary to build and fly your own creation, since you will be guided through every step of the construction and given some special tips for efficient flying.

The entry fee is \$1 for adults and teenagers. No entry fee for junior class (children 12 and under). Everything you need to build and fly is included in the entry fee. The junior class contest will be held at 7 p.m.

Guaranteed fun for all! For more information call JAY HOFFMAN at x4156, JIM ZAGEL at x4076 or TONY LEV-ELING at x4041.—Tony Leveling

Harper's Index

Number of U.S. politicians who have appeared on Sesame Street:

Price of an electronic rosary, from the Divine Love Sanctuary in Rome: \$40.99

LIBRARY NEWS

NEW IN THE LIBRARY

Particle Accelerator Physics. Helmut Wiedemann. Springer, 1993. QC793. 3. B4W54 1993, locked cases.

Riemannian Geometry. Manfredo Perdig ao do Carmo. Birkhauser, 1992. QA649. C2913 1992, locked cases.

Relativistic Quantum Mechanics of Leptons and Fields. Walter T. Grandy, Jr. Kluwer, 1991. QC793.5.L42 G73 1991, locked cases.

Instrumentation for Engineering Measurements. James W. Dally et al. Wiley, 1993. TA165.D34 1993, locked cases.

An Introduction to Quantum Field Theory. George Sterman. Cambridge U., 1993. QC174.45.S781993, locked cases.

Quantum Chaos. Katsuhiro Nakamura.

Cambridge U., 1993. QC174.17.C45 N35 1993, locked cases.

Finite Superstrings. J.G. Taylor et al. World Sci., 1992. QC794.6.S85 T39 1992, locked cases.

Int. Workshop on Heavy Scintillators for Scientific and Industrial Applications (1992: Chamonix) Editions Frontieres, 1993. QC787.S34 I57 1992, main.

Basics of Space Flight. Ludwik M. Celnikier. Editions Frontieres, 1993. TL790 .C35 1993, main.

International Conference Wavelets and Applications (1992: Toulouse) Editions Frontieres, 1993. QA403.3.157 1992, main.

Frontiers of Life. 3rd Rencontres de Blois. Editions Frontieres, 1992. QH325 .F76 1992, main.

Erwin Schrodinger, Philosophy and the Birth of Quantum Mechanics. Editions Frontieres, 1992. QC16.S265 E78 1992, main.

TRANSPARENCIES

Advanced Study Conference on Heavy Flavours (1993: Pavia). Topical Workshop on Proton-Antiproton Collider Physics (1993: Tsukuba U.). Both in transparencies reference.

PREPRINT DATABASE

To get a list of the most recent preprints received, connect to the Library's catalog by doing either: SET HOST FNLIB, or TELNET FNLIB.FNAL.GOV. Username = Library. Use the catalog's "search mode" and search by the latest Tuesday, e.g.: find preprint and cataloged 22-FEB-1994.

EARTHQUAKE

continued from page one

Some from Fermilab's group said they spent the next three hours trying to find humor amongst the disaster. "We were trying to laugh about it. You have to laugh. It's a good coping mechanism," said Marilyn. Among some of the humorous observations, Susan said, that for her, the scariest part of the earthquake was seeing 100 physicists in various forms of sleepwear at 4:30 a.m. Her biggest worry: "I wonder if we'll get combat pay for this?" Marilyn added, "There I was, I didn't have my glasses, I'm in my night shirt, and Susan tells me my hair looks great." Marilyn's biggest worry: "I couldn't get a cup of coffee the entire day."

Despite this disaster, all but a handful of participants decided to stay for the school. If it wasn't the earthquake that affected them, it was the aftershocks. There were approximately 3,000 aftershocks during the two-week period of the Particle Accelerator School. "A lot of them happened in the middle of the night when we were trying to sleep," said JIM MORGAN (AD). "The thing was, you didn't know if they were going to get stronger, weaker or go away. You just wait and see what happens." "Monday night I didn't sleep very well," said ANDREW BRAUN (AD). "There were six aftershocks and I woke up with every single one."

Many of the participants were struck by the phenomenon of "phantom shocks," when the body mimics an aftershock when there is none. As David pointed out, "After an aftershock you would say, 'Did you feel that one, or was it in my mind?""

"We were very fortunate," said Susan. "No one from Fermilab was hurt and we didn't lose anything of value. It was easy for us, we didn't have homes that were damaged. For me, it was fascinating."

"I don't have as much affection for the experience as Sue does," said Marilyn. "It was very traumatic for me and still is. It's very personal. What you experience and what the after effects are become very personal."

"It was definitely an interesting experience and not that big of a deal," said Jim. "I didn't think about leaving (California), but was just as glad when the two weeks were up."

DOE EXPANDED VALUE #7

Leadership, empowerment and accountability are essential.

- · We are visionary in our everyday activities.
- Leaders trust and support individuals to make informed decisions about the processes that they own.
- · We are effective stewards of the taxpayer's interest.
- · Our actions are result-oriented.

NEW IN **STOCKROOM**

1042-1115 Union, bulkhead, 316 S.S., compression, Parker P/N 4-4 WBZ-SS only, 1/4 in. x 1/4 in.

1218-0700 Washer, flat, type 18-8 S.S. mil. spec., domestic only, .562 I.D., 1.375 O.D., .109 in. thick, screw size 1/2.

1315-0359 Toner, cartridge, for Apple Laserwriter Pro 630 printers, Apple P/N M6018G/A.

1320-1335 Plotter pen, disposable, for plotter paper, HP#17825P, fiber tip pens, .3MM tip, black, 4 pens per package.

CLASSIFIEDS

VEHICLES

1987 Ford Tempo GL Sport, 2 door, sport suspension, BF Goodrich radial TA's, 84k miles, AC, PS, PB, auto trans., AM/FM/cassette, good condition, best offer, call 708-393-7138.

1987 Ford Ranger XLT, 4 cyl, 5 speed, A/C, AM/FM/cassette, \$3,500 o.b.o. Call Bill at x4553 or 708-892-9763.

1986 Olds Cutlass Ciera, 4 dr., PS, PB, Auto, AM/FM stereo, 4 cyl., good gas mileage, clean, good car, must sell, \$2,000 o.b.o. Call Karen at x8258.

MISCELLANEOUS

Mac Plus, 2.5 meg. mem., cooling fan & switched outlets, \$250; Mac bottom hard drive, 45 meg., \$170. Call Lloyd at x2990 or 708-879-1969.

REAL ESTATE

Open house: March 6, March 13, 1-4 p.m.; 3 or 4 bedroom bi-level in Shorewood, close to Rt. 59, minutes away from 155 & 180, new roof & C/A, corner lot, low taxes, 325 N.Brookshore Dr., reduced to \$124,900. Call 815-744-2339.

STOCKROOMS TO CLOSE FOR INVENTORY

The Fermilab Stockrooms will be closed for annual inventory on the following schedule:

Wilson Hall Stockroom: Closed Friday, May 13 at 12 noon. Reopen Monday, May 16 at 12:30 p.m. Site 38 Stockroom:

Closed Monday, May 16 and Tuesday, May 17 all day, both days.

Please plan accordingly. Call the Supply Office at x3808 if you have questions.

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FermiNews is published by the Fermilab Publications Office

MS 107, PO Box 500 Batavia, IL 60510 • 708-840-3278 • FNAL::TECHPUBS

Fermilab is operated by Universities Research Association, Inc.

under contract with the U.S. Department of Energy

The deadline for the Friday, March 18, 1994 issue is WED., MARCH 9. Please send your article submissions or ideas to the Publications Office.