# The Newsletter of the Fermi National Accelerator Laboratory

## LAB TO SHUT DOW DURING WINTER HO

Director JOHN PEOPLES has announced that the Laboratory's operations will be shut down during the 1995 winter holiday season. The Lab will shut down at the close of business December 21, 1995 and reopen with normal business hours on January 2, 1996.

Employees are required to take four of the scheduled seven days involved in the shut down as vacation days. Three of the days are scheduled Fermilab holidays. Your 1995 floating holiday can be used to cover one of the four days. Persons who do not have sufficient vacation time will be excused without pay, but will receive holiday pay for the three scheduled holidays.

Only functions necessary to maintain site integrity will remain operating. The housing facilities will be open for residents. The Business Office will provide information regarding payroll distribution at a later date.



JIM SHULTZ and FRED ULLRICH of the Laboratory Services Section Visual Media Services group have been awarded a third-place trophy from the International Television Association (ITVA) Chicago Chapter for their video tape, The Main Injector: Building Our Future.

tion/Employee Communication cat-

Jim and Fred received the award as part of the 1995 ITVA Chicago Philo Award competition that honors the best videos in the Chicagoland area. The script was written in-house and edited by Jim and Fred. Their entry in the Informa-

(l to r) Jim Shultz, Chuck Marofske, head of the Laboratory Services Section, and Fred Ullrich display their bronze Philo award trophy.

egory won them a Bronze Philo award. Others entered in the competition included United Airlines (gold), the Illinois Farm Bureau (silver), Country Companies and Sears Roebuck & Co. The Information/Employee Communication category honors programs that explain or disseminate information to audiences within or vitally involved with an organization. The Bronze Philo is presented to programs judged to meet stated objectives that demonstrate very good standards of production.

Both Jim and Fred said they were very honored to receive the award. "It's nice to be recognized by your peers," noted Fred.

The ITVA is a non-broadcast professional association. This is the tenth year the Chicago chapter has held their Philo Award competition. The award honors Philo T. Farnsworth, known as the father of electronic television. The videotape can be seen in the Visitor Theater on the 15th floor of Wilson Hall.

## **FermiNews**



Friday, April 21, 1995 • Volume 18, Number 7

Wasteline page two
Construction to Begin on New Waste Handling Facility page three
Mark Edel Creates Software of Worldwide Proportions page four
People & Events

## NEWS FROM THE WASTE MINIMIZATION SUBCOMMITTEE

EARTH DAY

In keeping with Earth Day, the Waste Minimization Subcommittee will have a table set up in the Cafeteria, today, April 21, 1995, from 11 a.m. to 2 p.m. Representatives from the committee will be there to hand out information and answer your questions. Please stop by and see us.

#### RECYCLING NEWS

We met with our recycling vendor and have some new collection information. Pickup day will be Mondays for Wilson Hall and the Accelerator Division. All other locations will be picked up on Wednesdays. Feynman will have bi-

weekly pickups. If your recyclables are not picked up on the scheduled date, please let Kevin, x2248, or Kay, x2279, know. We would like to evaluate this scheduling, and would like to hear about problems with it.

We are looking into getting a cardboard baler for Wilson Hall. This would greatly reduce the volume cardboard takes up. We will also realize a greater return for baled cardboard. In the meantime, please break down your boxes before placing them in the bins.

At this time wood is not being recycled but we are looking into several possibilities. If you have any suggestions, give us a call. All plastics are now being recycled. Number 6 plastics are collected separately. Number 6 plastics include the Styrofoam bowls and cups from the Cafeteria (no paper, please), the plastic cups and plastic silverware. All other plastics should be placed in a separate container. This includes pop bottles, yogurt containers (rinse or wipe inside) and other plastic containers. Take note of the containers for "other plastics." There are also separate containers for pop cans. Please separate your recyclables.

If you are not presently recycling, make an Earth Day resolution and pick up a recycling bin at the Site 38 Stockroom.

## ES&H CAUTIONS MEDICAL RADIATION RECIPIENTS

The use of radioactive materials in medicine for diagnosis and therapy has become commonplace, often replacing surgical and other invasive procedures. A few of the more prevalent of these procedures are bone scans (Technetium-99m or Fluorine-18), stress tests (Thallim-201) and iodine therapy (Iodine-123 or Iodine-131). The injected materials emit radiation and are quickly converted into a stable isotope because of their relatively short half-lives. Radioisotopes are also eliminated from the body through natural biological processes. For a short period of time after procedure, there may be sufficient activity in the body such that it can be detected with radiation monitoring instrumentation.

Fermilab has radiological facilities with

procedures in place to prevent radioactive material from leaving the site and to prevent contamination. For the reasons stated previously, a medical procedure involving a radioisotope may prevent the detection of contamination on an individual, interfere with the surveying of materials for release, or result in an erroneous measurement of one's occupational exposure.

If you are scheduled to undergo a procedure involving radiopharmaceuticals, please contact the ES&H dosimetry manager at x3642 or your division/section radiation safety officer so that necessary arrangements can be made to avoid complications.

Your physician or radiologist is best able to provide you with information regarding the procedure from the isotope administered, the effective clearance time and the total dose that you will receive. Should you have questions regarding Fermilab's policies regarding medical exposures, contact your division/section radiation safety officer.—Elaine Marshall

#### Radiation Safety Officers

Accelerator Divisi	on:	x4041
Business Services	Section:	x3032
Facilities Enginee	ring	
Services Section:		x8002
Physics Section:		x4546
Research Division	:	x4570
Technical Suppor	t Section:	x3382

Radiation Physics staff: x4646

## CONSTRUCTION TO BEGIN ON NEW WASTE HANDLING FACILITY

The Department of Energy has given its approval for Fermilab to begin construction of a new facility that will improve the Lab's efficiency in handling low-level radioactive waste.

Approval for a new 14,200 square foot low-level radioactive waste handling facility was given following an Environmental Assessment by the Department.

Construction of the facility, to be located at the southwest corner of A-2 and Batavia Roads, is expected to begin in June, noted project manager CHUCK ZONICK (ES&H). The two buildings now serving as low-level radioactive waste handling facilities at Site 67 will be screened for radioactiv-

ity and released to the Lab as soon as they are no longer needed for low-level waste.

According to ROD WALTON (ES&H), the new building will greatly increase the efficiency and safety of handling low-level radioactive waste. "In the past, low-level radioactive waste was processed for shipment at an old farm site—not a very modern facility. This new building will have more space that will allow for storage, sorting and screening of materials. And since the facility will be centrally located on site, it will be more secure and easily accessed by Security," noted Rod.

Rod added that the new facility will consolidate the low-level radioactive

handling operations that are also carried out in the Railhead storage area. This will eliminate the need to transport materials back and forth through the site.

The materials that are and will be handled in the low-level radioactive waste facility have been made radioactive through exposure to particle beams at Fermilab. The items with accelerator-induced radioactivity are primarily metal accelerator components, liquids and compactible/disposable items such as rags or clothing. The radioactivity is relatively short-lived, with typical half-lives from one to six years. There will be no increase in the amounts of low-level wastes produced at Fermilab as a result of construction of the new facility.

## ARBOR DAY FESTVITIES ANNOUNCED

Help create a more beautiful world—plant a tree during Fermilab's Arbor Day festivities April 28, 1995. Approximately 130 native trees and shrubs will be available to plant from 11:30 to 1 p.m. in the field west of Site 38/

Warehouse 1. All you need to do is bring a shovel and wear appropriate clothes. Lunch will be served courtesy of Nalrec, and parking is available at Site 37 and Site 38. The rain date is Monday, May 1, 1995. Don't

miss

this

chance to help make Fermilab and the earth cleaner and more beautiful.

According to the Sierra Club, "Trees have a special role to play in relation to global warming, as their growth is a process that actually reduces atmospheric CO<sub>2</sub>." Planting a tree is an effective way to fight the greenhouse effect. It is estimated that each mature tree consumes, on average, about 13 pounds of CO, per year. And urban trees consume it at a rate about 15 times that of rural trees. By providing shade and evaporative cooling, trees also affect local temperature. Clusters of urban trees can cool ambient summer air temperature by 10 degrees, reducing local energy demand (for air conditioning) by 10 to 50%.

### Bring Your Daughter to Work Day

The Lederman Education Center welcomes you and your child on National Take Our Daughters to Work Day, April 27. Here is a chance for you and your child to learn more about Fermilab science and technology. The two of you will play Particle Pool, detect Invisible Bullets, watch for Messengers from Space and Race for Energy. We now have four rooms with over 20 interactive exhibits that demonstrate the ideas, tools and methods of particle physics. We will be open as usual, 8:30 a.m.-5 p.m. Please let us know you are coming no later than April 24 by calling GAYLE STEPHENS at x5059 or e-mail her at stephens@fnal.gov. If enough people respond, we will schedule a Cryogenics show and provide juice and cookies at 1 p.m.

## MARK EDEL CREATES SOFTWARE OF WORLDWIDE PROPORTIONS

When MARK EDEL of the Computing Division set out to write a text editor computer program for his own work he had little idea that its use would grow beyond his own computer, let alone to thousands of Internet users worldwide.

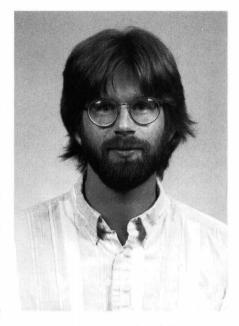
But today, Mark's text editor, NEdit, is filling the computer screens of computer programmers and Unix system users around the globe.

"It's a basic text editor—a program of the style that you see on Macs and Microsoft Windows," said Mark. "It's a mouse and menu driven, multi-window program."

Mark created the text editor after finding existing text editors difficult to use. He noted that similar Unix programs were not as complete, properly formed or easy to use. "I was actually using the Mac to edit files over the network on the Unix system because I didn't care for certain editors that were available. I eventually developed NEdit and it evolved into a usable editor. Several people in my group started using it and then its use grew to include people inside the Lab."

NEdit can be used for both programming and general text editing. Many of the features are geared for programming, however, including adjustable indentation for blocks of text and automatic indentation that allows programmers to create a running indent. The text editor can also process Unix tag files, automatically finding tagged or declared information in a file. People doing their word processing in Latex can also use NEdit to edit their documents.

Mark noted that now the vast majority of NEdit users include thousands of



Internet users across the globe. "There seem to be a lot of foreign users from Europe, Australia, just about anywhere the Internet goes."

NEdit is available to the public through FermiTools, a Computing Division initiative, coordinated by RUTH PORDES, which offers selected software to the community. NEdit is available by anonymous FTP, FTP.FNAL.GOV in the PUB/NEDIT directory.

### BENEFITS NOTES

## HELP WITH FINANCIAL PLANNING

What's the difference between stocks and bonds? What is compounding interest? Will I have enough money to retire? How can I protect my assets? The answers to these and other questions related to financial planning will be addressed in an upcoming financial education series available to employees in mid-May.

For the convenience of employees, arrangements have been made to have a

TIAA-CREF representative at Fermilab to discuss financial planning concerns. The financial education series is divided into three life stages: early career, mid career and late career. The message of each stage will focus on the issues relative to each life stage.

You will receive at your home an invitation from TIAA-CREF to participate in the particular seminar that best fits your needs. Watch your mail for your invitation.

#### PPO CLAIMS PROCESSING OF ANCILLARY HOSPITAL CHARGES

When you receive services at a hospital, you can expect to receive bills from the hospital facility and also bills from some of the hospital staff (e.g. radiologist and anesthesiologist) for ancillary services provided at the hospital. If the hospital is an out-of-network hospital (non-PPO provider), the facility and ancillary bills are paid after the deductible at 80%. If the hospital is an in-

continued to page eight

### FOR YOUR HEALTH AND FITNESS

#### HOW MUCH EXERCISE DO I NEED?

When you read about the health benefits of physical activity, it almost sounds like an ad for snake oil: "When used according to directions, this product can help you lose weight, age more slowly, reduce stress and tension and sleep better; it tones muscles, strengthens joints and bones and prevents artery disease, high blood pressure and diabetes." Sounds too good to be true. Do all exercise programs really deliver all of these benefits?

To maximize the health benefits of your exercise program, you need to include the right amounts of the right kinds of activities in your program, including:

#### Aerobic activity

Aerobic exercise challenges energy production systems. Our bodies adapt to exercise demands by improving these systems. Benefits include improved fat metabolism and higher levels of HDL cholesterol, the "good" kind associated with reduced risk of artery disease. Greater insulin sensitivity (cells respond better to insulin) results in better blood sugar regulation, which also reduces artery disease risk. Regular aerobic exercise

reduces the tendency of blood platelets to clump together, thus decreasing the likelihood of dangerous blood of clots. The heart becomes a more efficient pump and beats more slowly at rest.

Aerobic exercise requires

energy expenditure; we burn calories that might otherwise be destined for storage as fat.

#### • Resistance Training

When we apply force against a resistance, such as elastic bands or a stack of weights, our muscles, bones and joints adapt by becoming stronger. Denser bones are more resistant to osteoporosis and stronger muscles and joints are less prone to injury. Maintaining adequate strength is especially important as we age. Many older adults become so weak they can no longer perform the essential tasks required for independent living, such as grocery shopping and meal preparation. Some researchers have noted that with regular resistance training, such age-related loss of function could be postponed at least 10 to 20 years for most people.

#### Stretching

Adequate joint flexibility prevents injury and chronic musculoskeletal problems, such as low back pain. Like strength, flexibility declines as we age. Regular stretching can slow this decline and reduce that stiffness that keeps us from enjoying activity.

The following are recommendations for the minimal amount of exercise required for producing the benefits described above:

- Aerobic activity: 3 to 5 times per week, 20 to 60 minutes per session.
- Resistance training: 2 times per week, 8 to 12 reps per exercise, 8 to 10 exercises, including all muscle groups.
- Stretching: 3 to 5 times per week.

Aerobic exercise appears to be beneficial even at fairly low intensities. But the lower the intensity, the longer the workout duration needs to be. In other words, 20 minutes per session is enough if you are working at a high intensity. If you are walking at a moderate pace, 45 minutes to an hour would be a better length.

Of course, you will want to be sure any changes you make in your exercise program are right for you. Check with your doctor if you have health risks or concerns.

#### **EVERY ACTIVITY COUNTS**

In addition to the basic recommendations given above, daily activity of every kind contributes to physical fitness and good health. Taking the stairs instead of the elevator, walking your errands, volleyball on the beach, working in the garden, playing with the kids—these all burn calories and contribute to a high-energy lifestyle that reduces risk of heart disease.

#### START SLOWLY

If you are new to exercise, build your exercise program gradually. You are in it for the long haul—it's a lifetime of activity that counts. Your objective for the first few months is to stay injury-free and healthy, and set up a routine that's going to become a lifelong habit.

#### THE BOTTOM LINE: ANYTHING IS BETTER THAN NOTHING

Do these recommendations seem overwhelming? Start small. What about two exercise sessions per week that include some aerobic exercise, 10 to 15 minutes ofweightwork and five minutes of stretching, or maybe a walk on the weekend. This routine would contribute significant health benefits over the years.

—Barbara A. Brehm, associate professor of exercise and sports studies, Smith College, Northampton, Massachusetts.

## People Events

## ARTS & LECTURE SERIES PRESENTS

#### PILOBOLUS AND FERMILAB'S QUARTET IN RESIDENCE, THE ARIANNA QUARTET

Pilobolus is a major American dance company of international influence. The group was formed in 1971 by Moses Pendleton and Jonathan Wolken, Dartmouth undergraduates who met in a dance class. From the outset the troupe was acclaimed for its unusual mix of physicality, humor, gymnastic qualities and invention. They

perform at Ramsey Auditorium on Saturday, April 22 at 8 p.m. Tickets are \$20. For reservations, call xARTS.

The Fermilab Arts Series, in conjunction with the Northern Illinois School of Music, presents the final concert of the season by its quartet-in-residence: the Arianna Quartet. The quartet will present its last concert on April 30, 1995 in Ramsey Auditorium at 2 p.m.

continued to page seven



### 20-Year Service Awards Presented

Director John Peoples presented 20-year service awards to 27 Fermilab employees at a luncheon February 3, 1995 at Chez Leon. Pictured are: (Row 1, l to r) Rick Thies, Yolanda Valadez, Edith Brown, Michelle Gleason, May West, Allen Forni, Billy Arnold and Sharon Lackey. (Row 2, l to r) Jose Trevino, Don Rapovich, Mike Becker, Frank Turkot, Moyses Kuchnir and Herman B. White. (Row 3, l to r) Jim Fitzgerald, Dominick Carullo, Chuck Brown, Don Fisher, Mike McKenna, John Crawford and Director John Peoples. (Not pictured) J. Peter Berge, Carol Davis, Randi Franck, Joel Hurst, Chris Quigg, William Robotham and Dale Sherwin.

## SKINNER ELECTED TO COUNCIL

BARRYSKINNER of the Accelerator Division/Cryo Department was elected to Warrenville's City Council April 4, 1995. Barry will serve a four-year



term as alderman in Warrenville's Ward 2. This is Barry's first political office. He has worked at the Lab for the last 16 years.

## BRIDGE CLUB SEEKS MEMBERS

In the mood for a good game of cards? Join the newly-formed bridge club. Games are held on Thursdays at the Users Center Music Room from 7:30 to 9:30 p.m. The club is open to all levels of player. For more information, call Stephan Vandenbrink at x5001, Scott Metzler at x3509, Ping Hu at x8421 or Mark Peters at x8699.

## PHOTO DEVELOPING SERVICE NOW OFFERED

Fermilab is now offering on-site photo developing. The drop box for personal film is located in the vending area in Wilson Hall, first floor. Processed photos can be picked up in the Recreation Office, WH15W. For information, read the instructions on the drop box or call Jean at x2548 or Karen at x5427.

#### ARTS & LECTURE SERIES

continued from page six

No advance ticket purchase is necessary. Tickets will be available at the door 45 minutes prior to the performance for \$5.

The Lecture Series presents a lecture by George Smoot, an astrophysicist from Lawrence Berkeley Laboratory, on the origins of the early universe May 5 at 8 p.m. in Ramsey Auditorium. Smoot reviews how we came to our present understanding with particular emphasis on the data from the COBE (Cosmic Background Explorer) satellite in his lecture "Observing the Early Universe." Read the May 5 issue of FermiNews for details.

## STOCKROOMS TO CLOSE

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

#### WILSON HALL STOCKROOM

Closed Friday, May 12, 1995 all day. Will re-open Monday, May 15 at 1 p.m.

#### SITE 38 STOCKROOM

Closed Monday, May 15 and Tuesday, May 16, 1995, all day both days.

Please plan accordingly. For further information, call the Supply Office at x3808.

## Harper's Index

Estimated portion of Shaquille O'Neal's 1993 income he earned by playing basketball: 1/5

Number of the four most highly paid sports figures worldwide last year who are race-car drivers: 2

### MOVIE SCHEDULE

The Fermilab International Film Society presents movies from all over the world. Movies are shown at 8 p.m. Fridays in Ramsey Auditorium. All foreign films have English subtitles. Admission is \$4 for adults. Call x8000 for more information.

#### May 12 Kika

A black farce on sex and violence. This satire on tabloid TV and the public's fascination with it offers burning insight and an indifference to political correctness. Pedro Almodovar, director, Spain, 1993, 116 minutes.

### NALWO NEWS

Nalwo invites everyone to a potluck supper tonight, April 21, at the Village Barn from 5:30 p.m. to 8 p.m. The Fermilab International Folk Dancers Performing Group will entertain from 6:30 to 7 p.m., and teach and lead everyone in simple dances after supper. Please bring a dish to share or contribute \$3 at the door. There is an additional \$1 contribution from adults for beverages. Babysitting and pizza for children is provided.

Nalwo has arranged a visit to the Morton Arboretum to see the daffodils and fruit trees in bloom. Meet at the Users' Center on Thursday, April 27 by 10:30 a.m. We will carpool (it's a 20 minute drive) to the Arboretum, stroll around the park, eat a picnic lunch you bring or buy lunch at the Arboretum cafe, and return to the Lab by 2 p.m. Call Selitha Raja, 708-305-7769, to register for the trip and reserve a place in a car.

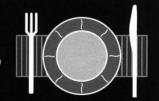
## VOLLEYBALL SEASON BEGINS MAY 8

It's time to hit the beach again! The summer coed sand volleyball season begins May 8. Games are played Monday and Tuesday evenings. The captains meeting will be held at noon,

April 26 at the volleyball courts. For more information contact MAXINE SNEE at x8014, FNALV::MAXINE or JEAN GUYER at x3126, FNALV::JEANM.

## Chez Léon Menu

Lunch (Wed) \$8.00 • Dinner (Thurs) \$20.00 Reservations: x4512



Wednesday, April 26 • Crepes with asparagus and ham in a Madeira cream sauce, fresh garden salad, fresh fruit platter

Thursday, April 27 • Melon and prosciutto, red snapper with Creole sauce, risotto with wild mushrooms, vegetable of the season, hazelnut torte with Frangelico cream

#### BENEFITS NOTES

continued from page four

network hospital (PPO provider), the facility and ancillary bills are paid after the deductible at 90% even though the ancillary providers may be out-of-network.

It has come to our attention that the claims office may not always be adjusting the ancillary provider's bills correctly when a PPO hospital and non-PPO ancillary providers are used. The reason is related to the order of receipt of the bills by the claims office.

The reimbursement payment system is driven by provider tax identification number. If the tax I.D. number belongs to an out-of-network provider, the system automatically pays at 80% and at 90% for a PPO provider. The claims adjuster can override the system when there is a match between a PPO hospital facility bill and an out-of-network ancillary provider bill and pay both at the 90% level. However, for that to happen, the hospital bill has to arrive first in the claims office. If the out-of-network ancillary provider bills the insurance company first, the bill will automatically be paid at the 80% level because a matching hospital bill cannot be found.

The claims office is aware of the problem. The claims adjuster tries to catch

## CLASSIFIEDS

#### **■ VEHICLES**

1993 Toyota Corolla DX, loaded except power windows & locks, 60k mile warranty, 26k miles, \$11,700 o.b.o. Call Lourdu at x2215 or 708-898-6806.

1985 Olds Cutlass Brougham, auto, P/B, P/S, P/W, etc., etc.; 1984 Lincoln Continental Mark VII, Southern car, no rust, loaded, must see. Call Bob at 708-896-8052.

1983 Volvo station wagon, stick, air, 115k miles, 1 owner, well maintained, \$2,200. Call Joe at x4103.

#### ■ MISCELLANEOUS

Mechanic owned 21.5 ft. Wellcraft Sportfisher boat, fully loaded. Call Bob at 708-896-8052.

Air conditioners: Sears 11,000+BTU, 5 yr. old, \$180; GE 4,000+BTU, \$75. Call Tim at x4070.

as many of these situations up front as possible. CIGNA is looking for a more efficient solution to the problem. In Ladies' Northwestern golf clubs, right-handed, powder blue/white bag, used twice, \$300. Call Shelley at x3324.

5 Pc. bedroom set, 2 dressers, 2 nightstands, queen-size frame & headboard, Mediterranean style, very good condition, \$450 o.b.o.; Refrigerator, side-by-side, works great, \$125 o.b.o.; Solid pine drop leaf kitchen table & 4 chairs, needs minor repair, \$45 o.b.o. Call Kevin at x2248 or 708-369-2698.

#### ■ NEEDED

Transportation needed for a visually impaired person w/excellent mobility and no dog between Naperville (Washington St. @ 75th) & the Industrial Center Building 1 day/week. Call George Villa at x2899 or 708-416-3875.

#### PETS

2 handfed cockatiels, 9 wks. old, cage not incld., \$30 ea. Call Mary at x3632 or Al at x8516.

the meantime, if you find an error, please feel free to call the claims office at 1-800-828-7622 for a readjustment.

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Please send your article submissions or ideas to the Publications Office.

