

FermiNews

The Newsletter of the Fermi National Accelerator Laboratory

DRELL REPORT SIGNALS FUTURE OF HEP

The recently-released Drell Report on the future of high-energy physics has received positive reaction from both Capitol Hill and the high-energy physics community. The report, *High Energy Physics Advisory Panel's Subpanel on Vision for the Future of High-Energy Physics*, was issued by the HEPAP subpanel in May following five months of careful study and consideration and close contact with those in the high-energy physics field. The subpanel held four town meetings and received nearly 400 letters from those in the physics arena during the months of study.

The "Future Vision" subpanel, led by chairperson Sidney D. Drell of the Stanford Linear Accelerator Center, was asked by Secretary of Energy Hazel R. O'Leary in November 1993 to define "a long-term program to pursue the most important high-energy physics goals now that the SSC has been terminated."

The subpanel convened in January 1994 and presented its findings to HEPAP at

its meeting on May 23. Later that day, the findings were presented in Washington, D.C. before the House Subcommittee on Science. The findings prompted high praise from many in Congress, including House Science Committee Chairperson George Brown (D-CA), Subcommittee Chairperson Rick Boucher (D-VA) and ranking Republican Sherwood Boehler (R-NY).

At the hearing, Sidney Drell emphasized that physicists should publicize and unite behind the report, which was unanimously accepted by the subpanel as well as the full HEPAP.

"At the time of the convening of the subpanel, there was a feeling that the field was in disarray and it had lost its core vision for where it was going," said JOEL BUTLER, a member of the HEPAP Subpanel and Fermilab Computing Division head. "The purpose of the report is to state what the field's vision of the future is and help to create and define it."

The report "is well thought out, thorough and represents a consensus of the community. (DOE) accepts the basic recommendations of the Drell Subpanel Report. These recommendations, in our opinion, represent a balanced approach to maintaining the health and vitality of the current U.S. program while, at the same time, advancing it to the next energy frontier."—Martha Krebs

Martha Krebs, director of the Department of Energy's Office of Energy Research said the report "is well thought out, thorough and represents a consensus of the community. (DOE) accepts the basic recommendations of the Drell Subpanel report. These recommendations, in our opinion, represent a balanced approach to maintaining the health and vitality of the current U.S. program while, at the same time, advancing it to the next energy frontier."

Joel said the report goes beyond just stating the subpanel's conclusions and recommendations. It also details many

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DRELL REPORT

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concerns the subpanel has about the field other than those emphasized in its recommendations.

RECOMMENDATIONS

In the report, the subpanel recommends that DOE's high-energy physics program budget remain at a constant-level-of-effort between FY1995 and FY2002, with an additional \$50 million "bump" in FY1996, FY1997 and FY1998. This level of funding would allow for productive use of existing domestic facilities and their ongoing upgrades and enhanced effort in accelerator research and development. It would also allow for U.S. participation in CERN's proposed Large Hadron Collider (LHC), an additional major report recommendation. Even without a bump, the subpanel calls for the U.S. to join the LHC and make necessary sacrifices at home.

In addition, the subpanel recommends

- that the U.S. should continue to be among the leaders in the world-wide pursuit of the answers to the fundamental questions of particle physics.
- that the government should give consideration both to restoring earlier practices of full authorization at the start of major scientific construction projects and to introducing budget cycles of two or more years.
- that if there is no three year, \$50M a year bump in the budget, DOE appoint a special subpanel of HEPAP to review the current U.S. high-energy physics program, preferably jointly with the National Science Foundation, and recommend appropriate changes and sacrifices.
- that proposals for a scientific mission for the former SSC site should un-



Sidney Drell discusses the subpanel's report during the 1994 Fermilab Annual Users Meeting.

dergo stringent peer review. The review should call upon international experts in relevant areas of science to judge the proposals on their scientific and technical merit, feasibility and cost effectiveness compared with other possible avenues for doing the same work. Concerns about the vitality of a superconducting magnet laboratory for high-energy physics that is geographically separated from an accelerator laboratory will have to be weighed in evaluating proposals for such a laboratory on the former SSC site. The subpanel believes that these concerns weigh against such use.

DIRECTOR'S PERSPECTIVE

"The report of the Future Vision subpanel recognizes the potential of the current U.S. high-energy-physics program and its ability to make a major discovery if adequately funded. It also recognizes the importance of successfully collaborating on the construction of multi-billion dollar new high-energy physics. The panel recommends that the U.S. community participate in the LHC project. If the U.S. does participate in this project, then Fermilab will participate in both the construction of the LHC and its detectors. Finally, the subpanel recognizes the

importance of accelerator R&D for the planning of new accelerators that will carry the energy frontier beyond LHC. I am particularly gratified that the Drell panel recommends a \$50 million bump so that we restore the vitality of the current U.S. program during the construction phases of the Main Injector and the SLAC B Factory. These additional funds will be extremely important for Fermilab after five years of decreasing budgets," said Fermilab Director JOHN PEOPLES.

COPIES AVAILABLE

Copies of the executive summary of the Drell Report containing the conclusions and recommendations are available through:

- World Wide Web, HEPNRC's Home Page:
[HTTP://WWW.HEP.NET/](http://WWW.HEP.NET/)
- Fermilab Library's WWW Home Page:
[HTTP://LIBMC1.FNAL.GOV/](http://LIBMC1.FNAL.GOV/)
- Anonymous FTP:
[FTP.HEP.NET](ftp://HEP.NET) (under directory: Drell. Report)
- Paper copies of the report are also available from the Fermilab Library, reference AC789.2.U5 D73 1994 and the Publications Office.

"The subpanel recognized from the beginning that it could only start the process of restoring U.S. high energy physics to health," said Joel. "There is much work to be done over the next few years to sharpen the vision of the future outlined in the report and to realize its basic objective—a healthy and vibrant program well into the next century." He added, "The report is a well-written, easy-to-read report that stands on its own as a physics document. This is our future; everyone should read it." ■

SOFTWARE USERS BEWARE

Attention software users! If you install and use software on your computer that you've borrowed or did not purchase, you could be violating a software license agreement and infringing on a copyright.

The unauthorized use of copyrighted software, such as making copies other than for backup, is categorized under Illinois law as theft of property and could carry a felony charge.

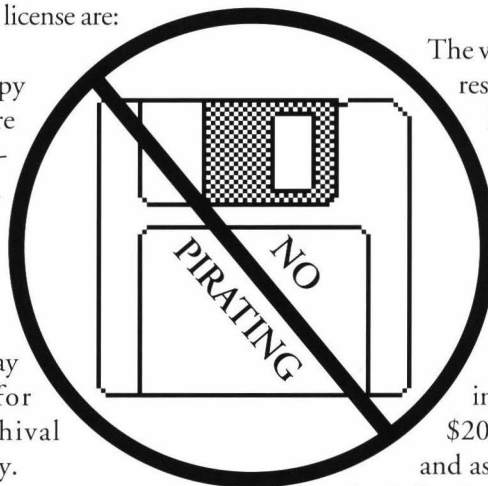
The Fermilab Legal Office reminds all software users at the Laboratory that the misuse of software may result in the employee being personally liable for such misuse or violation. Failure to adhere to the Lab's policy on the management and use of computer software may result in Lab disciplinary action.

A basic premise of copyright is that the author/owner of the software never relinquishes the ownership rights to the work. This means the buyer of computer software does not "own" the software, but merely has purchased the right to use the software under the restrictions listed in the software license.

Some basic restrictions listed in a typical software license are:

- Only one copy of the software can be installed on a specific machine/CPU at a time.
- One copy may be kept for backup/archival purposes only.
- The written material accompanying the software may not be copied.
- The software may not be reverse engineered, decompiled or disassembled.
- The software may not be installed on a network unless this right is explicitly granted in the license.
- Any transfer of the software to another user must include the most recent update and all prior versions and the software company must be

notified in writing.



The violation of any of the restrictions of a software license may result in the author's terminating the license to the user and the return or destruction of the software. Penalties for copyright infringement include fines as high as \$20,000 per infraction and as high as \$100,000 if the infraction is willful. Willful infractors can also be subject to federal criminal penalties including fines and as much as a year in prison.

Copies of the Laboratory's policy on the use of licensed computer software programs are available by contacting your section or division head or JEAN LEMKE in the Director's Office. Any questions or requests for information regarding software licenses or their use should be directed to MICHAEL RALLS of the Legal Office.

—Michael Ralls

HOT OFF THE PRESS

A new report recently released by President Clinton and Vice President Al Gore outlining the Administration's strong support for fundamental research is now available on the Fermilab Library's World Wide Web Home Page "Hot Off the Press" section. A full text version of the report, *Science in the National Interest*, as well as a summary and a press release, is available on the WWW. You can connect to the Library's home page via the "Fermilab at Work" section of the Fermilab Main Home Page at <http://www.fnal.gov> or via the Library's home page at [\[libmc1.fnal.gov\]\(http://libmc1.fnal.gov\)](http://</p></div><div data-bbox=)

The 31-page report, a reexamination of the rationale and outlook for federal support of science, is the first presidential statement on science policy in 15 years. The document outlines five goals:

- Maintain leadership across the frontiers of scientific knowledge.
- Enhance connections between fundamental research and national goals.
- Stimulate partnerships that promote

fundamental research and effective use of resources.

- Produce the finest 21st century scientists and engineers.
- Raise the scientific and technological literacy of all Americans.

With this report, the Administration reaffirms the importance of basic, fundamental science, stating, "This Administration is committed to making today's investment in science a top priority for building the America of tomorrow."

JENNIFER GOLBECK PUTS ENERGY INTO INTERNSHIP

This summer JENNIFER GOLBECK learned that there is more to working in a physics laboratory than meets the eye. Jennifer, an Illinois Energy Education Development Program (ILEED) intern, spent eight weeks this summer at Fermilab working with VENKAT KUMAR, Energy Management Coordinator in the Facilities Engineering Services Section Engineering group.

"This has been a learning experience," said Jennifer. "I liked it a lot. I was interested in the physics program but wasn't sure about what was behind it. This (internship) helped me to appreciate not only the physics but also the engineering related to it."

Jennifer, a senior at Crystal Lake High School who plans to study elementary theoretical physics or astrophysics at the University of Chicago, spent most

of her time working with Kumar on the In-House Energy Management Program. She worked on compiling utility statistics, analyzing data and preparing reports and spreadsheets. "I did learn that the government does have a good energy management program," Jennifer added.

Jennifer was one of 10 students throughout the state who were selected for ILEED internships. The ILEED program is offered through the Illinois Department of Energy and Natural Resources (ENR) to afford junior or senior high school students the opportunity to work with governmental or private sector entities and be involved in energy or environmental projects. Each intern is given the opportunity to choose where he or she would like to spend the internship. This is the fifth annual energy/environmental intern



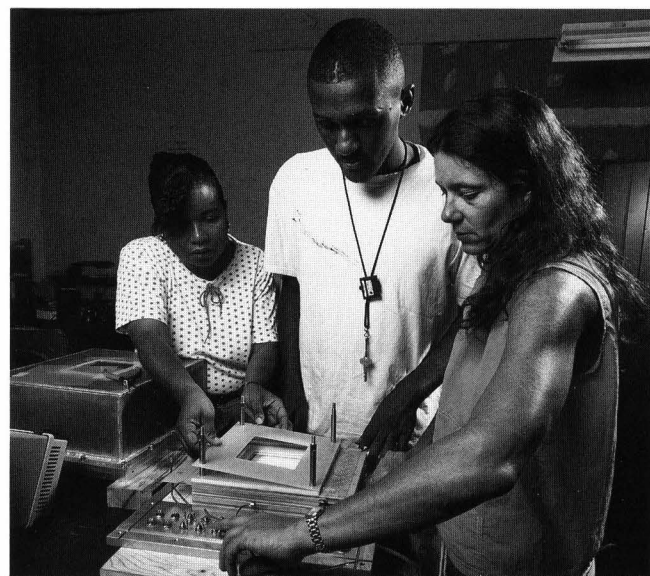
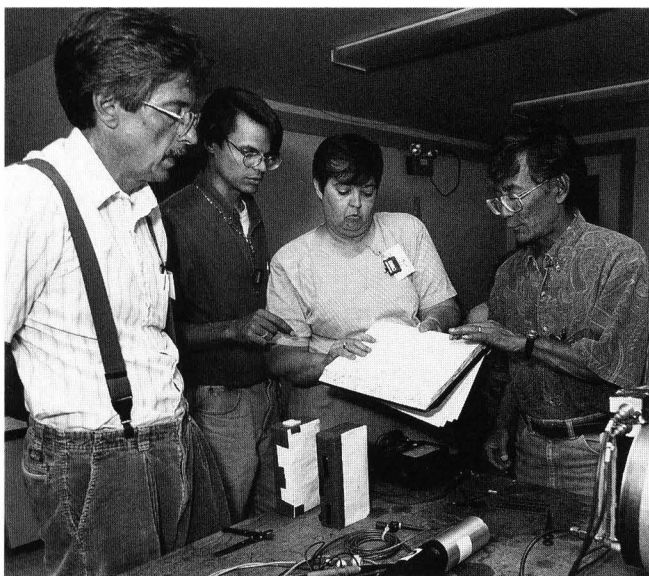
Jennifer Golbeck

program that the ENR has offered.

As for Fermilab in general, Jennifer said she "loved it." "I learned a lot about physics. I attended the summer lecture series for students, spent time in

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A Place to Learn

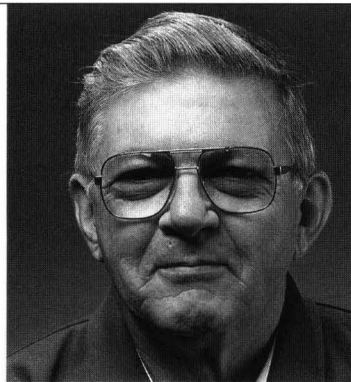


Students and teachers alike gathered at Fermilab this summer to take part in many education programs offered through the Education Office. At left, Topics in Modern Physics Program advisor Chuck Ankenbrandt (l) and program participants Michael Gallo (Chicago), Penelope Bolden (California) and Mani Rai (Arizona) construct a cosmic ray telescope. At right, Teacher Resource Associate (TRAC) teacher Carolyn Cox (l), Summer Internship student Reggie Hicks and Fermilab mentor Karen Kephart assemble a wire chamber for experiment E815. Each summer, students and teachers from all over the country come here to experience scientific research firsthand and learn more about physics and mathematics.

People Events

ARTHUR COOK TO RETIRE

After nearly 26 years of service to the Laboratory, ARTHUR (Art) COOK is retiring. Art began working at Fermilab in November 1968, taking positions in the Booster Group, Physics Department and Computing Division throughout his career. He will leave the Lab August 31, retiring as an operations specialist in the Computing Division. Art was recently involved in the development of the SVXII silicon strip detector for CDF.



Art plans to stay in the area during his retirement and to keep involved with his church and the American Legion. He also plans to spend more time flying his radio-controlled airplanes.

"I enjoyed my stay at Fermilab. The work was very interesting and all in all it was a good 26 years. I met a lot of nice people and made many friends whom I'll never forget."

ARTS SERIES PRESENTS

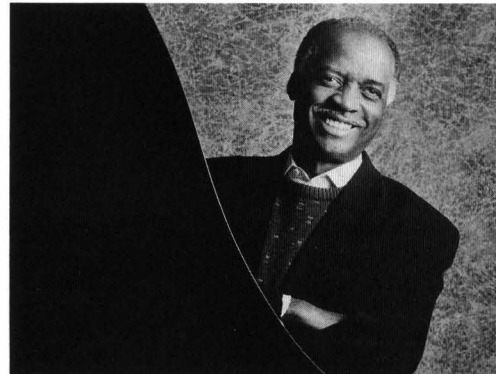
ALTAN AND AHMAD JAMAL

Don't miss Altan, named "the hottest group in the Celtic realm these days," by Scott Alarik of the *Boton Globe*. They have been earning critical and popular acclaim since the group's first album came out in 1990. They visit Ramsey Auditorium on Saturday, August 27 at 8 p.m. Tickets are \$13.

Ahmad Jamal is a continually evolving, uncompromising and uniquely original stylist. As he says, "I'm a storyteller." Legendary jazz pianist Ahmad Jamal performs in a trio setting at Ramsey Auditorium on Saturday, September 10, 1994 at 8 p.m. Tickets are \$18.

His influence on other artists is broad, beginning with pianists such as Red Garland, Cedar Walton and Benny Green to name but a few. The late, great Miles Davis often cited Jamal's influence on his own music, and as singer/pianist Shirley Horn simply states, "Ahmad is number one!"

continued to next column



Ahmad Jamal

ARTS SERIES

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Jamal began to play the piano at three. He began formal studies at seven and joined the union at 14, saying he was 16. Encouraged by his mother, he studied with the noted African-American concert singer, Mary Caldwell Dawson. His album *But Not For Me*, recorded live in 1958, rose to the top of the charts and stayed there for 108 weeks. Later he gained audience recognition by recording the title tune for the *M*A*S*H* film soundtrack.

Don't miss Altan on August 27 and Ahmad Jamal on September 10. For reservations for either performance, call xARTS weekdays from 9 a.m. to 4 p.m.

Share Your News

Do you lead an exciting life outside of Fermilab? Are you involved in local politics, do you volunteer with the park district, give extra time to your local health organization or participate in community activities? If you are involved in any community service activities, the *FermiNews* staff would like to know. In response to reader requests, we will begin to highlight employees' lives outside the Laboratory. If you would like to share your news, or "rat" on a fellow coworker who is too shy to toot his or her own horn, please contact the Publications Office at x3278 or MS 107 or come see us on WH15SW.

TIME FOR ONE LAST SWIM

In the mood for a swim? There is still time for a few more laps before the pool closes for the summer. Hours for the rest of the swim season are:

■ August 22-August 26: 12 p.m. to 8 p.m. - adult swim only

■ August 27 and August 28: 12 p.m. to 8 p.m. - family swim

■ August 29-September 2: 12 p.m. to 8 p.m. - adult swim only

■ September 3-September 5: 9 a.m. to 8 p.m. - family swim

The pool closes for the season at 8 p.m. September 5.

ATTENTION BOWLERS

Wednesday night mixed nonsanctioned league play for the 1994-95 season begins September 7 at 5:30 p.m. at Bowling Green Sports Center. This is a 31-week season. The league consists of 12 four-person teams from the Lab and Northern Illinois Gas Company. There are a few openings on some of the teams or interested bowlers can come with a pre-formed team. The league can expand. The cost is \$9. For information, call TERRY O'BRIEN at x4851.

Harper's Index

Pounds of tomatoes used in the "battle" fought each August at the Festival de la Tomatina in Buñol, Spain: **880,000**

Number of watermelon varieties that are registered trademarks: **6**

TASTE OF FERMI TONIGHT

Ready for lots of fun and food? Attend the Taste of Fermi Family Picnic tonight from 5 to 10:30 p.m. in the Village. There will be plenty of activities for all, including pony rides, a moon walk, dunk tank, Ferris wheel and weird science shows. A folk dance exhibition will also

be held, along with adult and children's games, steam engine corn boil, clowns, model airplane exhibition, cake walk and raffles. And for even more fun, a street dance will be held from 6:30 to 10:30 p.m. with the band "Just Friends" performing. Don't miss this Nalrec event.

SHEAR MADNESS TICKETS

Don't miss the fun, and the sheer delight of Shear Madness! This comedy whodunit has been playing in Chicago at the Mayfair Theater for 11 years and now you have a chance to see it.

Set in a unisex hairstyling salon that is the scene of a wacky murder, the play is filled with up-to-the-minute spontaneous humor and is different every time you see it. As thousands of previous Shear Madness witnesses know, the play encourages the audience to

become armchair detectives—everyone is given the chance to solve the crime.

All are invited to bring family and friends to this hilarious murder mystery on Sunday, October 23 at 3 p.m. Tickets are \$17 (regular price \$23). Tickets are available on a first-come, first-serve basis, so hurry and join the madness. To order tickets, contact JEAN GUYER in the Recreation Office at x2548. The deadline to order tickets is September 26.



Children's Center hits the Road

Four and five-year-olds from the Children's Center arrive at Wilson Hall on their annual bike ride. Once each summer the children ride to the high-rise to enjoy lunch in the Cafeteria. The children also take weekly Thursday bike trips, but as Sue Hardy of the Center said, "We usually don't make it past the buffalo." Although there is a waiting list at the Center for infants, there are a few openings in the three and four-year-old classes. For more information, call Patty at x3762.

MARK YOUR CALENDARS

WELLNESS COMMITTEE SETS FALL CALENDAR

- The Fermilab Wellness Committee is presenting a seminar on Wednesday, September 7 from noon to 1 p.m. in 1West on allergies and asthma by John Dugar, MD. Dr. Dugar is a board certified allergist from Oakbrook Terrace.
- Weight Watchers is holding an informational meeting on Tuesday, September 13 from noon to 1 p.m. in 1West. The original 10-week session saw a weight loss of 238 pounds by the participants!
- Tuesday, September 20 in the WH

Atrium the Medical Office is offering a free blood pressure screening from 11:30 a.m. to 1 p.m.

- "How to Baby your Back" is being offered on Thursday, September 29 from noon to 1 p.m. in 1West by Marianjoy in Wheaton.
- Back by popular request is Joseph Nuzarello, MD. Dr. Nuzarello will be talking on prostate disease October 25 from noon to 1 p.m. in 1West.
- On November 2 the Visiting Nurses Association will be at Fermilab for flu and DT injections.

Here's to a healthy fall!

SEVERANCE PROGRAM QUESTIONS ANSWERED

The Benefits Office hosted two informational meetings on July 25 and 26 to answer employees questions about the Lab's severance program. Approximately 25 employees attended each of the lively discussions. If you have any further questions concerning the pro-

gram or need to clarify issues discussed at the meetings, you should call PAULA CASHIN at x4365 or CHUCK MAROFSKE at x3396. Please remember that the last day to apply for the severance program is August 26 at the close of business.

MOVIE SCHEDULE ANNOUNCED

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 \$3 for adults, \$.50 for children 12 and under. Coffee and cookies will be served on the second floor mezzanine following each film.

■ August 26: *In the Realm of the Senses*, (17 years of age and older only) An erotic love story, based on fact. A geisha and her lover isolate themselves from society in their own world of intense love-making. Nagisa Oshima, director, Japan, 1977, 115 minutes.

■ September 9: *Dodge City*, classic Western story of the struggle between hard-working cattlemen and a corrupt local official. Olivia de Havilland and Ann Sheridan star. Michael Curtiz, director, U.S., 1939, 104 minutes.

From the Family of Carl Swoboda

Dear Friends,

We wish to thank you for the many prayers, loving support and kindness expressed to us during the recent weeks. We are greatly touched by the warmth and sincerity shown by your presence at the beautiful services for Carl and the way you have continued to care for us.

Your cards reminded us that you too are missing Carl's way of making light of the human problems we all face. Carl's wit helped to make

the day go by faster. We now know that many personal problems were discussed in Carl's office and that he helped many people.

Your stories brought to mind many special memories of Carl. We continue to receive and appreciate them. Carl would be pleased to know that so many people remember ways in which he touched them.

Your concern for us reveals that you

are aware of the close family that Carl nourished and supported. We now know just how many people were touched by Carl.

We will miss Carl but he has left us with a lasting impression of someone committed, honest, and happy ... at work and at play, as son, husband, father and friend.

Sincerely,

Joy, David and Lara Swoboda

JENNIFER GOLBECK

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the Library and talked to students from many universities. I learned much outside the internship."

Kumar, too, had praise for the internship. "I think it's very good. It gave me a chance to think more about what we do here and then try to convey that to someone else. Things, both good and bad, become clearer when seen through another's eyes. This was a good opportunity to expose a young student to the energy environment. It gave (Jennifer) an idea about some of the things required to run a physics program."

If you are interested in hosting an intern, contact the ENR at 217-785-2800 for more information. Supervisor permission is required to host an intern.

NEW STOCK ITEMS

■ 1226-1673

Screw, mach., bind. hd., type 18-8 S.S. slotted, class-2A thd., 1/4-20 NC x 3/8.

■ 1226-2642

Screw, mach., round hd., type 18-8 S.S. slotted, class-2A thd., 1/4-20 NC x 3/8.

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Fermi National Accelerator Laboratory*

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CLASSIFIEDS

■ VEHICLES

1989 Honda Accord DX, 5 sp., PS/PB, AC, AM/FM cass., excell. cond., \$6,300 o.b.o. Call Marge at x3800.

1986 Hyundai Excel, 3 dr. hatch, golden brown, 69k miles, 4 spd, air, AM/FM, cass., good cond., \$1,400 o.b.o. Call Eric at x3666.

1980 Saab 900 Turbo, 4 dr., hatch, ltd. ed., well main., very reliable, 127k miles, \$1,800 o.b.o. Call Dhiman at x3105 or 708-879-6704.

■ MISCELLANEOUS

Darton jr compound bow, \$75; 5" color TV, AC/DC, \$125; curtain rods, \$5; HO train set, offer; heavy bag, gloves & speed bag, \$75; loveseat/sleeper, \$100; travel bike bag, \$20; bike exercise roller, \$35. Call Greg at x3011 or 708-557-2523.

White down couch, \$200 o.b.o.; blue recliner, \$75 o.b.o. Call Leigh Ann at x4868 or 708-820-3368.

Samsonite ultralite luggage, soft-sided, black, like new, used twice, garment bag, \$80; carry on, \$40; duffel, \$40. Call Jim at x4293 or 708-416-0548.

2 refrigerators: 1 side-by-side, Montgomery Ward, 22 cu. ft., tan, \$300; 1 Kenmore, 20 cu. ft., white, \$200. Call

Pam at x3349.

Vacuum cleaner, \$50; coffee maker, \$10; bookcase, couch, chair, dining room set, end tables, each \$10 o.b.o. Must sell. Call Eric at x3666.

Full sofaset, \$225; dining table w/4 chairs, \$160; microwave, \$70; full-size wood study desk, \$45; many other items: 2nd dining table, chairs, coffee table, etc. Moving, all must go. Call Dhiman at x3105 or 708-879-6704.

Dog house, 33"w x 39"d x 37"h at peak, opening 11"x15", treated lumber w/shingled roof, very heavy, \$25 o.b.o. Call Joy at x3649 or 708-879-2387.

Twin mattress & foundation, barely used, excellent cond., \$75/set; bed linens, fit xtra long twin, comforter & dust ruffle; 19" Sharp color TV w/manual tuning, \$25; book shelf w/oak-like finish, 58"l x 18"w x 48"h, assembles completely w/o hardware, \$15; 1 in. vinyl blinds: 1 white 39"x64", 1 ivory 36"x64", \$5 ea. Call Nanette at x4550.

■ REAL ESTATE

4 bed ranch, 2.5 BA, full basement, 3-car attached garage, LR, family room w/stone fireplace, formal dining rm., many amenities, on quiet cul-de-sac. Call 708-377-2336.



The deadline for the
Friday, September 2, 1994
issue is WED., AUG. 24.
Please send your article
submissions or ideas to the
Publications Office.



50%
TOTAL RECOVERED FIBER
10% POST-CONSUMER FIBER