

The Village Trier



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"PIONEER" EXPERIMENTS WIND DOWN

The Internal Target Group recently reached a milestone in its experimental program. Three groups have completed experiments there during the past months, in each case bringing to a successful conclusion a series of experiments running more or less continuously since the early days of Fermilab high energy physics.

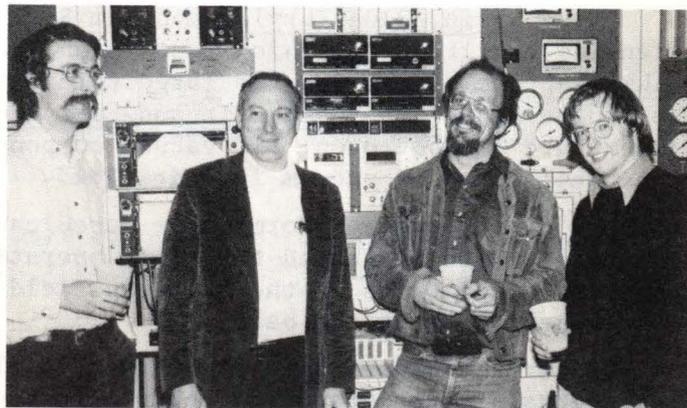
In November 1977 the Soviet-American collaboration completed Experiment 289, a study of small angle p-He scattering. This collaboration, working at C \emptyset since 1972, first developed a cryogenic H₂ jet for use in internal target experiments. Its members include Edgar Jenkins, Ernie Malamud, Mitsuhiro Miyajima, Ryuji Yamada, Anatole Kuznetsov, Vladimir Nikitin, Yuri Pilipenko, Andrezej Sandacz, Boris Morozov, Peter Nomokonov, Vitali Smirnov, Adam Bujak, and Dan Gross. This jet, designed by Yuri Pilipenko and Victor Bartenev, produces high jet density while maintaining good Main Ring vacuum.

Experiment 522 by the Indiana University group, studied inclusive polarization in p-p scattering. Its members include Steve Gray, Bryan Martin, Homer Neal, Harry Ogren, Robert Polvado and Dave Rust. They first began working at C \emptyset in 1974 on Experiment 313.

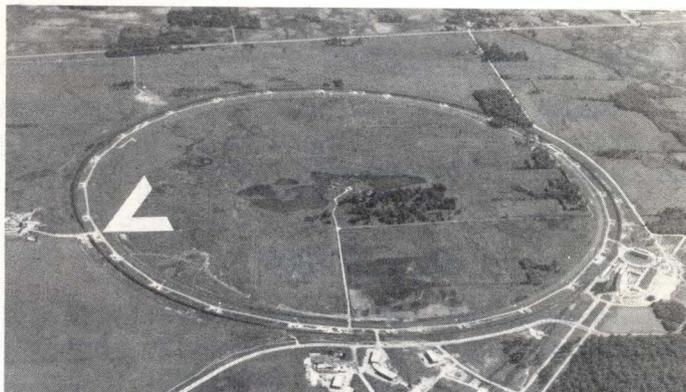
Experiment 552 by the Rutgers/Rochester/Imperial College group, measured differential cross-sections for pp and pd elastic scattering. Its members include Steve Olsen, Gary Warren, Renee Warren, Felix Sannes, Bruce Collick, Roger Rusack and Ion Siotis. They were the first group to use the superconducting spectrometer at C \emptyset (Experiment 198). This spectrometer, designed by Steve Gray, Paul Mantsch, Joel Misek and Chuck Nila, is a large remote-controlled movable superconducting quad/dipole system.

The past year has been an extremely busy one for the Internal Target Group, headed by Peter McIntyre. In addition to

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...Celebrating Internal Target successes are (L-R): P. McIntyre, R. Huson, S. Olsen, R. Rusack...



...Internal Target area (arrow) on Main Ring at C-Zero Service Building...



...Soviet-American scientists at C-Zero (1977)
Front Row (L-R)--V. Nikitin, R. Yamada, B. Morozov; Standing (L-R)--D. Gross, P. Nomokonov, Y. Pilipenko, E. Malamud, A. Kuznetsov, V. Smirnov...

"PIONEER" EXPERIMENTS (Continued)

supporting the experimental program described above, the group has designed and is constructing the electron beam for the proton/antiproton cooling ring.

Joel Misek, Chuck Nila, and Larry Sobocki have designed all electron beam components. Bill Kells and Denny Curl are building microwave and laser diagnostics for the beam. Ed Faught is working with the Controls Group (Bob Ducar) to build the control system which interfaces the electron beam components to computer control.

Lloyd Klein, Paul Kurylo, and Tom Rathbun are installing the special aluminum-foil solenoids, built at $C\emptyset$, which contain and guide the electron beam. Roy Meeks and Bill Weihmiller are assembling the large toroid magnets that bend the electrons in line with the proton beam. Ed Podschweit and Larry Sobocki are building a large high-vacuum, high-temperature bakeout oven; all vacuum components for the ring will be baked to $800^{\circ}C$ to achieve $<10^{-10}$ Torr vacuum in operation.

Don Mizicko has performed the Herculean task of choreographing all the above activity in parallel with an around-the-clock operations schedule. Les Oleksiuk has developed computer calculations of the magnetic field that confine the electron beam, and of electron trajectories in the beam.

No further experimental operation is planned until early 1979. In the coming months, the Internal Target Group will play a strong role in completing the cooling ring. They are also supporting the program headed by Stan Pruss to improve the Main Ring vacuum so as to extend coasting beam lifetime for colliding beam studies.

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WANTED: PHONE DIRECTORY SURVEY FORMS

Employees are reminded to return telephone information forms. A new Fermilab phone directory will be published based on information submitted by employees. Return forms to the Communications Center, CL-1E.

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COMPUTER USERS GROUP VISITS

Touring the Laboratory Wednesday (April 26) were about 200 computer users from around the nation. Dave Ritchie, Fermilab computing department, arranged the visit for colleagues in DECUS--Digital Equipment Computer Users Society. Over 2,000 DECUS members are attending a week-long U.S. "Mini/Midi Symposium" at O'Hare Airport. Fermilab uses Digital and other computers in stand-alone and network configuration for data acquisition, control and analysis.

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NAUTICAL NOTE

George Doyle, Village Services, advises that the canoe/rowboat rental 'package deal' is \$44.00 for 10 day's use from 4:00 p.m. Friday until 9:00 a.m. a week from the following Monday.

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SALUTE TO "OL' SOL" MAY 3

Wednesday, May 3, will be a national celebration of the world's only inexhaustible, non-polluting, safe, terrorist-resistant and free energy source. It will be called Sun Day. Representing Fermilab in the observance will be Penelope Horak, assistant director-Technical Services. Ms. Horak will be among volunteers participating in "Sun Dial," a solar energy hotline. It will be based at the Department of Energy Chicago operations downtown office, 175 W. Jackson Ave. Unlike now-discontinued Earth and Food days, which were annual events, Sun Day is planned as a one-time occurrence only.

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1978 SWIM PASS SALE STARTS MONDAY;
FERMI POOL OPENS MAY 27

The ninth annual Fermilab pool season opens Saturday, May 27, at 9:00 a.m. Employees, experimenters and their families and employees of DOE, Advance Security and Mutual Maintenance are eligible.



Advance sales of 1978 Fermilab swimming pool memberships will begin Monday, May 1. The Personnel Department receptionist, CL-6E will sell memberships ...*Fermilab pool is fun for all ages...* from 8:30 to 11:30 a.m. and 1:00 to 4:30 p.m. Fees are: Individual--\$15.00; married couple--\$25.00; and family--\$35.00. Checks should be made payable to Fermilab. Visitors' daily admission charge will be \$1.50.

Pool hours will be:

Weekdays:

6 a.m. to 8 a.m. (adults only, no lifeguard)
11 a.m. to 9 p.m. (family swim, lifeguard)

Weekends/Holidays:

9 a.m. to 9 p.m. (family swim, lifeguard)

CHILDREN'S SWIM LESSONS

A 12-hour swim instruction program for children will again be taught by a certified water safety instructor at the Fermilab pool. Beginning and intermediate classes will be offered. Two four-week sessions will start in June. Fee will be \$15 per child for each session. Registration will be accepted from May 27 at the pool.

BLOOD PRESSURE SEMINAR, CHECKUPS FOR EMPLOYEES

May is National High Blood Pressure Month. In connection with the observance, an employee seminar on blood pressure will be given at 11:30 a.m. Wednesday, May 3, in the Central Laboratory first floor west conference room. Dr. Charles Lang, Fermilab physician, will speak and answer questions.

"High blood pressure, a serious, chronic disease, has no symptoms to warn of its presence," Dr. Lang says. "Unfortunately, some people with high blood pressure think that headaches, dizziness or feeling tense means that their blood pressure is high. They make the mistake of taking their medication only when such 'symptoms' appear.

"The only way to know if blood pressure is high is to have it checked. Controlling high blood pressure usually requires following a doctor's advice for daily medication," Dr. Lang said. He added that the Medical Office will offer free blood pressure checks for employees/users during May. No appointment necessary.

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ARBOR DAY OBSERVANCE POSTPONED

Arbor Day at Fermilab will be postponed from Friday (April 28). The observance has been rescheduled to obtain plantings and to allow planning for employee participation. A committee headed by John Paulk, Administrative Division, is being formed to coordinate the Laboratory planting project. Paulk said the committee will announce a new date for the event.

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ADMINISTRATORS ATTEND 'NEW DIMENSIONS'
SEMINAR

Six supervisors from the Administrative Division attended a "New Dimensions in Business and Life" seminar. Held two consecutive evenings in Chicago, the six-hour course focused on improving interpersonal communications, leadership styles, stress handling, salesmanship styles and achieving self-direction. It was sponsored by the Chicago Association of Commerce and Industry. About 500 business and professional people attended the meeting held in the Prudential Building auditorium. From Fermilab were: Richard Auskalnis, Purchasing; Clarence Carlson, Facility Operations; Dorothy Carlson, Housing; George Doyle, Village Services; Margaret Pearson, Public Information Office; and Ed West, Contracts.



...C.Hegarty (L), Seminar speaker, with Fermilab students C. Carlson, R. Auskalnis, E. West, D. Carlson, G. Doyle...

SAVE THE DATE -- May 15 -- for "Albert Einstein."

NOTE TO GARDENERS

Plan to till a Fermilab garden plot in 1978? Plot application forms must be received by the Garden Club on Wednesday (May 3). Forms are available from Recreation Manager Helen Ecker, CL-1W, Ext. 3126. For information, contact Alan Schiz, Ext. 3872. Rototillers may be reserved by calling George Doyle, Village Services, Ext. 3421.

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FROM THE LIBRARY ...

Paperback addicts are reminded of the exchange collection in the library. Make a note today to bring some and take some tomorrow.

SCIENTIFIC AMERICAN is so popular that three bound volumes have been missing from the library shelves for some time. We appeal for their return. Blue with gold lettering, the volumes are 212(1964), 221(1969) and 225(1971).

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SEMINAR FOR ENGINEERS/DRAFTERS

Fermilab engineers and drafters are invited to a seminar spotlighting a new in-house engineering drawing reproduction system. According to Sybil Krebs, Duplicating Services, a Xerox Corp. representative will demonstrate the 840 EPS system in Duplicating on Thursday, May 4, at 10:30 a.m. The machine automatically reproduces A, B, C, or D size drawings; reduces them 65% or 50%; folds and sorts prints. It can reproduce from anything printed, written, or drawn including computer printouts, accounting worksheets, PERT charts, graphs, schedules, maps and two 8-1/2 x 11 pages side-by-side. Advance reservations are requested by Monday, May 1. To sign up or for more information, contact Duplicating at Ext. 3323. If interest warrants, the seminar will be repeated in the afternoon.

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RECREATION NOTES . . . Fermilab-sponsored volleyball and softball teams for women are seeking additional players. No athletic experience required. To sign up or for more information, contact Helen Ecker, CL-1W, Ext. 3126....An all-employee survey is announced to determine interest in tennis lessons. On-site summer instruction for beginners or intermediate players will be offered by the College of DuPage if interest warrants. Evening sessions will be held weekly at the courts in the Village. Interested? Contact Helen in the Recreation Office, CL-1W, Ext. 3126....Several golfers are needed to complete teams in the Thursday night league. Contact Tim Gierhart, Ext. 4432.