

FERMILAB NEWS

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DOE AWARDS FERMILAB GRANT FOR PASSIVE SOLAR WALL

The Department of Energy has awarded Fermilab a grant to construct a passive solar wall.

"In this innovative concept proposed by Fermilab, we plan to convert an existing wall of the warehouse at the Phillips Farm into a passive solar collector," said Hank Hinterberger, head of Technical Services. "This collector not only provides for supplementary winter heating, but in the summer, it induces cooling by enhancing natural ventilation.

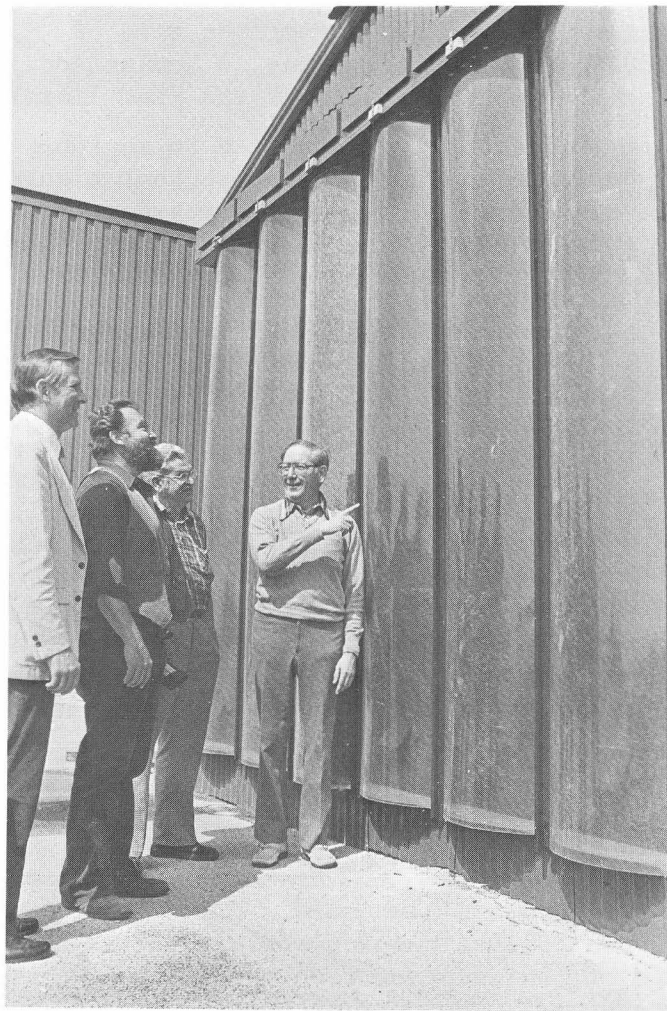
"This will be accomplished by converting the south facing wall into a passive collector by painting it black and constructing a translucent glazed wall over the black surface on furring strips. Top and bottom vents with temperature control louvers will be provided so that the heated air can either be circulated into the building or used to induce a chimney-type draft that will enhance summer ventilation.

"This innovative approach offers an effective means of retrofitting many other existing structures at Fermilab and elsewhere."

A prototype of the proposed much larger passive solar wall has been constructed on a wall of the sheet metal building just east of Industrial Building 2. (See photograph on this page.) Hinterberger, who also is Fermilab energy coordinator, is the designer of the passive wall.

Design of the warehouse passive wall will begin immediately, said Hinterberger. Construction will begin in about four months, and completion is expected to come about four months later, he added.

Fermilab's project is part of a large-scale program by DOE to retrofit more than 800 Federal government buildings so they can get part of their energy needs from the sun, explained Andy Mravca, area manager of the Batavia Area Office of DOE. The overall program is expected to be finished by



(L-R) Andy Mravca, Jack Jagger, Jim Buffenmyer and Hank Hinterberger with the prototype passive solar wall.

the end of 1981.

"Under its Solar Federal Buildings Program, DOE will award about \$31 million to 16 different Federal agencies," said Mravca. "These funds will be used for the design, construction and installation of solar systems in 843 buildings located in all 50 states and the District of Columbia."

Four projects will be funded in Illinois. They include facilities at Argonne National Laboratory, Scott Air Force Base in Belleville, a Federal building in East St. Louis, and, of course, Fermilab.

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SPIRES: SOPHISTICATED INFORMATION RETRIEVAL

At the touch of a few buttons, a vast network of high energy physics literature becomes available three-quarters of a continent away.

It's called SPIRES, acronym for Stanford Public Information Retrieval System. Packed into its high energy physics data banks at the Stanford Linear Accelerator Center computer are approximately 60,000 entries that are growing at the rate of 12,000 each year, according to Louise Addis, associate head librarian at the SLAC library.

"SPIRES allows a novice to search a very large body of literature that might take many hours if it were searched by hand and come up with the needed references," she said. "Our data base is comprehensive."

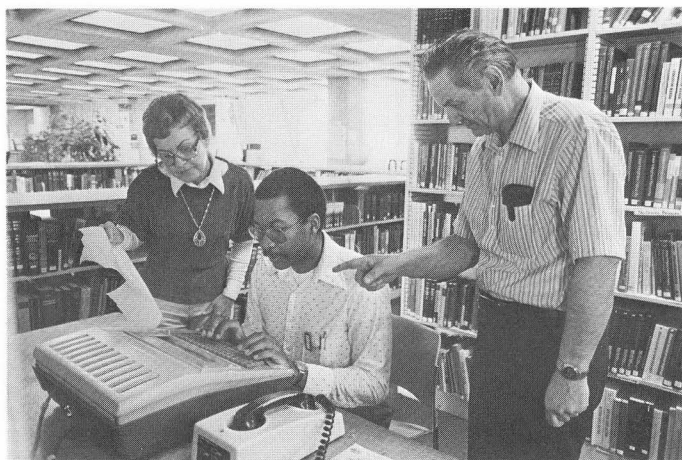
The data base goes back to January 1974, when SPIRES first started up, and to November 1975, when DESY (Hamburg, Germany) began providing SPIRES with its compilations on tape.

The Fermilab library, CL3S, has a terminal that is linked with SPIRES by telephone lines. The average search takes about 10 to 15 minutes, said Roger Thompson, head of the library. The library staff is available during library hours (8:30 a.m. to 5 p.m., Monday through Friday) "to do a search entirely (on request of a scientist) or we will get the scientist started," said Thompson. "Frequently, with a few basic instructions, the SPIRES user can carry on the search."

Thompson also said, "Our library has its own collection of preprints, proceedings of conferences, reports and other literature. The core of these is the preprint card file that is based on the same information found in SPIRES, but our file also identifies material that is actually in the library.

"Although Julie Zaborowski of our library staff spends many hours maintaining the preprint catalog and processing about 350 new preprints from around the world each month, we can retrieve information only by the first listed author of a paper. The contrast between our catalog's extremely limited search capability and the versatility of SPIRES really shows its tremendous advantage."

Using SPIRES, searches can be made by significant words in the title, by subject, by institution and by author,



Herman White of Research Division uses SPIRES. Assisting him are May West and Roger Thompson.

explained Thompson. "Frequently the first search question produces an overwhelming number of papers. Consequently, it is wise to narrow the request in various ways, such as making the subject more specific, limiting the dates--for example, from 1977 to the present--and by eliminating or adding certain authors or institutions.

"Thus searches can be done very rapidly because of the many and varied capabilities of the SPIRES system. Searches can be designed to include all papers by a single author; those by two or more co-authors; papers written on a specific subject before, during or after a certain date; and all of what I have just mentioned in any combination." Furthermore, SPIRES can tell a searcher how many times a particular paper has been cited (referred to), by whom and where.

Fermilab TM and TN references are in the SPIRES database. The information was set up by Ken Shafer and Louise Addis of SLAC and entered by Rene Donaldson and Becky Cole.

Publications which resulted from experiments done at Fermilab have, for the most part, been identified and tagged with an experiment number which can be used in SPIRES searches. (The project of identifying and tagging publications with experiment numbers, was initiated and carried out by Art Greene and Ken Shafer, working with Louise Addis, and resulted in two Lab booklets, "Publications from Fermilab Experiments" and "Theses from Fermilab Experiments" which are reasonably complete through 1978.)

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SHOWCASES ADD SPARKLE TO
FERMILAB SUMMER ACTIVITIES

by Ruth Ganchiff

The Fermilab Auditorium Committee is pleased to announce the production of a series of showcase performances in dance, jazz and folk music during the summer.

On Saturday, June 28, the Choreographer's Showcase will feature three companies who are returning to Fermilab, The Joel Hall Dancers, Pascual Olivera and Angela del Moral, and the Hubbard Street Dance Company. In addition to these favorites from past showcases, two exciting groups, the Chicago City Ballet and Ken and Judith Brelsfoard, will perform on the Central Auditorium stage for the first time.

The variety of styles performed by these companies is almost sure to please tastes for classical, modern, jazz, Spanish and comedic dance. The Choreographer's Showcases, produced in co-sponsorship with the Ballet Guild of Chicago, have always been among this area's most popular attractions.

On Saturday, July 19, in co-sponsorship with the Jazz Institute of Chicago, the Auditorium Committee has arranged a Jazz Showcase featuring three groups, each representing a different style, traditional, bebop and swing. The Chicago Hot Six, the Don DeMicheal-Chuck Hedges Swingtet and the Wilbur Campbell Bebop All Stars will provide a variety of styles that will trace the history of jazz from the 1920's to the present.

On Saturday, August 9, four distinctly different forms of folk music will be performed. Art Thieme, banjo player, guitarist, storyteller and singer, will represent traditional American folk music. Tom Dundee, noted songwriter and performer of contemporary folk, will play and sing his gentle, poetic ballads. Blues will be performed by Sparky Rucker. Sparky, whose style is reminiscent of Leadbelly's, is also a noted folklorist and raconteur.

The program will end with a sampling of traditional Irish music played on the fiddle, pipes, flute, bodhran and whistle by Kevin and Maggie Henry and Johnny McGreavy. Each of these talented musicians has been active in performing and promoting Irish music for many years. Mary Cooley, two time national prize winner in Irish music competition, will sing traditional Irish songs. * * * * *

NEW GERMAN CINEMA HERE
JUNE 19, 20 and 21

The Fermilab International Film Society will present five films selected from the best of the New German Cinema June 19, 20 and 21.

A free film, Werner Herzog's Land of Silence and Darkness begins the Fermilab Auditorium retrospective on Thursday, June 19 at 8 p.m. Documentary in style, the film concerns the deaf and the blind, but it is also about how we communicate and about the search for new paths of communication.

Friday's films presented at 7 and 9 p.m. at \$2/person are Coup de Grace, directed by Volker Schlöndorff, and The American Friend, directed by Wim Wenders.

Coup de Grace is an intricate romantic tale of a woman finding consciousness in the aftermath of the First World War. It is also a parable concerning the collapse of one class and the survival of another.

The American Friend is a dazzling thriller about a man who is tempted into killing a Mafia figure in order to obtain money and medical treatment in an attempt to cure his rare blood disease. Well photographed and in color, it is also a study in the breakdown of personality and identity under situations of stress.

Saturday's films at 7 and 9 p.m. are Aguirre--the Wrath of God, directed by Werner Herzog (admission: \$3/person), and Malatesta, directed by Peter Lilienthal (admission: free).

Aguirre--the Wrath of God is about a large Spanish expedition in the mid-1500's searching for the lost city of El Dorado. When an advance party is sent to explore a tributary of the Amazon, the conquistador's expedition falls into the hands of one Don Lope' de Aguirre, a power-driven lunatic who dreams of stealing an entire continent.

Malatesta tells the story of an anarchist, Enrico Malatesta, living in London about 1910. His dream is to achieve his goals through a peaceful revolution. It, however, is doomed in a world ruled by misery and brutality. The film arises out of the director's experiences with the political unrest in 1968-69 during which he asked himself where and under what conditions did men fight for their freedom.

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LOOKING FOR LOST AND FOUND?

Lose something? Contact the Communications Center, CL1NE. All items that are believed to have been lost are now turned in there, said Rudy Dorner, head of Emergency Services.

In the past, lost items were usually left at the Communications Center as well as the Travel Office, CL1W. But now, by having one centralized location, service is improved, said Dorner. The Communications Center is open 24 hours each day.

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PHOTON LEPTON CONFERENCE PROCEEDINGS NOW AVAILABLE

Proceedings of the Photon Lepton Conference held at Fermilab Aug. 23-29, 1979, are now available.

They may be obtained from Laura Sedlacek, Neutrino Department, CL12, Ext. 3048, at a cost of \$20 each. "An invoice will be prepared and cleared through the Accounting Department," she explained. "Within two or three days, your proceedings can be picked up here or we can mail it to you."

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CCNY AWARDS HONORARY DEGREE TO LEDERMAN

Leon Lederman, Fermilab director, was awarded an honorary degree of doctor of science by The City College of the City University of New York June 8.

The presentation was made by Alice Chandler, acting president of CCNY. Lederman is an alumnus of the school.

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Many requests are received from groups to use the Village picnic area. During the early years of the Laboratory's existence some of these could be accommodated. However, the clean up requirements became a burden on the Laboratory's maintenance staff and as the size of the Laboratory's own population grew, employee use of the grounds increased.

In recent summers visitors living on site normally filled housing space in the Village to full occupancy and frequently use the park areas in the Village for recreation. Consequently, to keep the space available for guest residents, employees and their families and to maintain control of maintenance costs, the picnic grounds are not available to outside organizations and groups during the summer months.

COLLOQUIUM COMMITTEE CALLS FOR SUGGESTIONS

The Physics Department Colloquium Committee is calling for suggestions on speakers and interesting scientific subjects for its 1980-81 season.

Those who have ideas have been asked to contact Petros Rapidis or Carlos Hojvat, Ext. 3201.

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BIRTH



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"PROVIDENCE"

Presented by the Fermilab International Film Society

Friday June 13 8 p.m. Central Laboratory Auditorium

Director Alain Resnais' 1977 masterpiece takes viewers deep into the tortured mind of a famous novelist. He is suffering from a fatal illness and spends a night hallucinating about members of his family: his dead wife, his son and daughter-in-law and his illegitimate son. As he drinks to ease his pain, he twists his hatred into material for a new novel. The talented cast includes John Gielgud, Ellen Burstyn and Dirk Bogarde.

Color 104 minutes RATED R Adults \$2 Children, 50 cents