

FERMINEWS

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WIDE RANGE OF TOPICS WAIT FOR SYMPOSIUM PARTICIPANTS

Everyone attending the International Symposium on the History of Particle Physics May 28-31 at Fermilab will have a choice of a wide range of lectures.

The symposium will focus on the roots of elementary particle physics, primarily in the area of cosmic rays and quantum fields theory in the 1930's and 1940's before the era of the great accelerators. All sessions will be held in the Central Laboratory auditorium. For additional information, contact Lillian Hoddeson, symposium secretary, in the Fermilab library, Ext. 3401. (Also see the article in the March 27 issue of FERMINEWS for more background on the speakers and round table discussion participants.)

Leon Lederman, Fermilab director, will open the symposium with welcoming remarks the evening of May 28. Paul A. M. Dirac will then speak on "The Origin of Quantum Field Theory."

On May 29, the speakers and their topics are Gilberto Bernardini, "The Intriguing History of the Mu Meson"; Victor F. Weisskopf, "Growing up with Field Theory (The Development of Quantum Electrodynamics in Half a Century): Personal Recollections"; and Carl D. Anderson, "Unraveling the Particle Content of Cosmic Rays, Including the Discovery of The Positron and Muon."

That evening at the symposium's banquet, Charles Weiner will give "An Historian's View of the Perils of Doing Contemporary History."

The next day, the speakers and their subjects include Satio Hayakawa, "Development of Meson Physics in Japan"; Robert Serber, "Elementary Particle Physics in the 30's--A View from Berkeley"; and Bruno Rossi, "The Decay of 'Mesotrons', (1939-1943). Experimental Particle Physics in the Days of Innocence."

The final day's speeches and subjects will include Willis E. Lamb, "Fine Structure



Continuing their work on the symposium are (L-R) Dick Carrigan, Research Division; Bridget Brown and her husband, Laurie M. Brown, Northwestern University and principal symposium organizer; Don Moyer, Evanston, a symposium discussant; May West, Fermilab Library; Joan Bjorken, Guest Office; and Lillian Hoddeson, Fermilab, another principal organizer. The photograph was taken in the library's history room.

of Hydrogen and Some Other Atoms"; Julian Schwinger, "Renormalization Theory of Quantum Electrodynamics--An Individual View"; and Robert Marshak, "Particle Physics in Rapid Transition."

On May 29 and 30, the program will be closed out with a round table discussion during which prominent historian-discussants will review and extrapolate many of the subjects covered. The discussants include Donald F. Moyer, Silvan S. Schweber, Robert W. Seidel, Dudley Shapere, Roger Stuewer, Takehiko Takabayasi, Spencer Weart and Charles Weiner.

Chairing the various sessions will be Edwin L. Goldwasser, morning, May 29; Herbert L. Anderson, afternoon, May 29; John A. Simpson, morning, May 30; Robert D. Sard, afternoon, May 30; and Yoichiro Nambu, morning, May 31.

Each lecture is expected to last around one hour.

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EXHIBIT RECALLS HISTORIC MOMENTS IN PARTICLE PHYSICS

An exhibit that contains memorabilia about particle physics is being prepared to coincide with the International Symposium on the History of Particle Physics (see story page 1).

The exhibit will be displayed in the gallery area of the Central Laboratory, CL2-S, and will remain there until about the middle of July. Many sources have made contributions to the exhibit, including the Museum of Science and Industry in Chicago, Kyoto University in Japan, Dr. Riccardo Levi-Setti of the University of Chicago, Lawrence Berkeley Laboratory and the Argonne National Laboratory.

Kyoto University's submission includes a full size copy of the hand-written first draft, dated Nov. 1, 1934, of Hideki Yukawa's first paper on the meson theory. Also on display will be a full size copy of the unpublished manuscript of Yukawa's first formal report on the meson theory. He read it at the regular monthly meeting of the Physico-Mathematical Society of Japan held on Nov. 17, 1934, at the University of Tokyo.

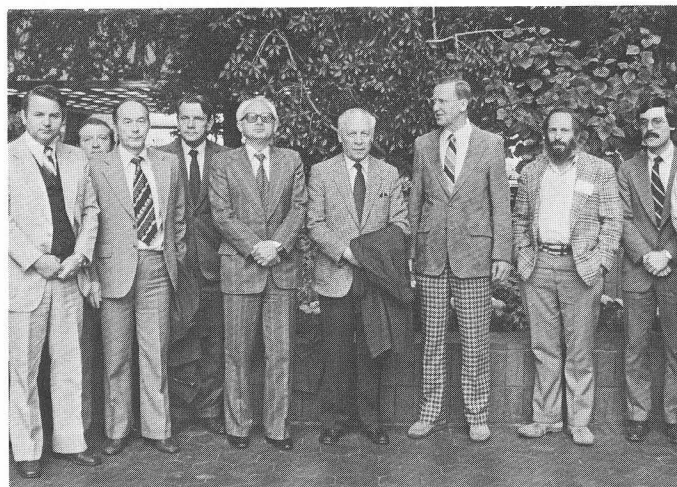
Michiji Konuma, professor of mathematics at Kyoto University, said, "These documents have never been displayed in public. These had disappeared from Yukawa's office for many years till our recent search and discovery (uncovered them). Furthermore, Yukawa had never spoken of their existence."

Levi-Setti has provided the exhibit with a number of particle track photographs from his personal collection. The exhibit also will contain many artifacts dating from the early 1930's through the 1950's, such as a Fermi clipper, a track sensitive target and a lens for a 12-inch bubble chamber, all provided by Argonne. Berkeley has sent a replica of the accelerating chamber of the first operating cyclotron. The science museum loaned the "D's" from a 30-inch cyclotron and a Perrins tube.

A variety of photographs and many smaller artifacts, such as vacuum tubes, also will be displayed.

Angela Gonzales and Jose Poces, both of Fermilab, Sandra Cox, exhibit consultant, and Carol Denby, Auditorium Committee, are preparing the exhibit for its opening.

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Polish businessmen and Fermilab leaders greet one another. From right to left, Don Hasfurther, Norman Gelfand, Phil Livdahl, Janusz Burakiewicz and other members of the delegation.

POLISH DELEGATION TOURS FERMILAB

Thirty members of the United States-Polish Economic Council toured Fermilab as part of their one-week visit to the Chicago area.

The delegation was led by Janusz Burakiewicz, president of the Polish Chamber of Foreign Trade. (This chamber is analogous to the U. S. Department of Commerce, and his position parallels that of secretary of commerce.) Accompanying the group was Don Hasfurther, executive secretary of the East-West Division of International Trade, U. S. Chamber of Commerce, and Alvina Ewing, public relations assistant with FMC Corporation in Chicago. She coordinated arrangements for the group's visit to the greater Chicago area.

Welcoming them to Fermilab was Phil Livdahl, acting deputy director. He told them that Fermilab is an outstanding example of international cooperation in research. Afterwards, Norman Gelfand, head of Program Planning in the Director's Office, gave the Polish businessmen a general orientation about Fermilab and accompanied them on a tour of the site.

Three Polish experimenters working here joined the delegation for lunch. They are Henryk Wilczynski and Andrzej Sandacz, both of Fermilab, and Wojciech Gajewski, Experiment 553 and the University of Pittsburgh.

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BIRDS ABOUND AT FERMILAB

Fermilab abounds in birds, some of them rare, some of them common.

To the 20 bird watchers - ages 4 and up (and one German shepherd, Melissa) - who participated in the recent spring bird hike here under the auspices of the DuPage County Audubon Society, their diligence was rewarded. Some of them considered the sighting of a flock of seven blue herons flying overhead and a black-crowned night heron, also on the wing, the most satisfying moments of the 2½-hour hike throughout the eastern part of the site.

Dave Carey, a physicist with the Meson Department, organized the hike.

Also sighted were a flock of red-winged blackbirds, a meadowlark, crows and a tree and a song sparrow. Heard in the distance was the call of the grasshopper sparrow.

Seen among the abundant varieties of waterfowl were Canada geese, coots, pied-billed grebe, shoveler, lesser scaup, Mallard duck, widgeon and a flock of blue-winged teals.

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CERN CELEBRATES OPERATION OF STELLA

CERN celebrated the initial operation of the European STELLA experiment with a ceremony earlier this year.

The STELLA experiment will transmit scientific data by satellite between nuclear physics laboratories, primarily in Europe. This approach will provide rapid and very low error data transmission for large amounts of electronic data gathered at CERN to six laboratories in member states. These are DESY, Hamburg, Germany; SACLAY, CEA, France; RUTHERFORD, Didcot, United Kingdom; PISA, Italy; DUBLIN, Ireland; and GRAZ, Austria.

STELLA will use the European telecommunications satellite OTS-2 that was launched in May 1978. The experiment will explore transmission techniques for quantities of data up to one megabit per second (a million bits of information per second). It will transmit physics data between the laboratories at speeds similar to the working speed of most computers.

The project is financed by the European Space Agency, European Communities, authorities of the concerned countries and CERN.

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CONSTRUCTION BEGINS ON INDUSTRIAL 4

Construction has begun on Industrial Building 4.

It will be located just east of the other three industrial buildings, and will be in such a location that the four buildings together will be approximately at the corners of an imaginary rectangle. The newest structure will match the other three in shape and construction and will contain approximately 15,000 square feet of space.

Initially, the structure will be used by the Energy Saver Division for magnet storage and testing. As the Tevatron Program proceeds, the structure will be integrated into the magnet facility.

In preparing the area for the new structure, four of five barns were moved to other locations on site. Construction is expected to be completed in under six months.

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REMINDER THAT SAFETY SECTION WANTS TO KNOW ABOUT UNUSUAL ACTIVITIES

Scientists who plan to conduct some activity that is unusual, complicated, special or non-routine should contact the Safety Section beforehand, said Linc Read, head of the Section. The number is Ext. 3580.

This reminder is to ensure that all safety, environmental and radiation requirements are met. Furthermore, by making arrangements in advance--well in advance whenever possible, urged work will not be held up while the Safety Section reviews procedures and procures any needed safety and health equipment.

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NEXT COLLOQUIUM SPEAKER

Prof. Herbert Gursky of the Smithsonian Astronomical Observatory, will be the Fermilab Physics Colloquium speaker, May 28.

His talk on "Large Scale Structure of the Universe" will begin at 4 p.m. in the Central Laboratory auditorium. A reception will be held at 3:30 p.m. that day in the gallery area, CL2-S.

His appearance here is arranged by the Physics Colloquium Committee.

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FERMILAB NOW HAS TICKETS
TO MARRIOTT'S GREAT AMERICA

Discount tickets for Marriott's Great America, a family entertainment center, can now be obtained at Fermilab.

They are available at the ticket sales desk in the Central Laboratory atrium. The price is \$8 a ticket. Children age 3 and younger are admitted free. The savings come to \$3 each ticket. (An earlier article in Ferminews gave incorrect prices.) The admission price covers unlimited access to all rides, shows and attractions. Tickets can be used through July 27 and from Aug. 25 through Oct. 13.

The 200-acre park is located on Interstate Highway 94 on Grand Avenue, Gurnee, about midway between Chicago and Milwaukee.

One of its newest attractions is "Demon." Columnist Howard Reich described it this way: "The 1.75 minute ride begins with a 90-foot climb, followed by a return to earth at 70 feet a second. It then swirls around two sky-high vertical loops, roars through an underground tunnel and spirals around a fiery red waterfall. Along the way, riders whiz past an ominous boulder wall and a mountainside emblazoned with the image of an evil-eyed demon."

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CHEZ LEON MENUS

Tuesday, May 27 - 7:00 p.m. - \$8.00

- Lemon soup
- Lamb loin chops stuffed w/prosciutto and pecorino cheese
- Mushrooms stuffed with peas
- Mixed brown and wild rice with walnuts
- Tomatoes, zucchini and red onion salad
- Grapefruit in raspberry sauce.

Wednesday, May 28 - 12:30 p.m. - \$4.50

- Fresh vegetable soup
- Asparagus and ham casserole in cream sauce
- Salad of the season
- Cantaloupe in port

Thursday, May 29

Booked

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An ultimate in energy conservation? Jim Meadows' Moped pulls a jinrikisha with Larry and Annette Bays. Meadows, who is with the Computer Department, takes his Moped (minus the jinrikisha) to work almost every day. It gets more than 100 miles per gallon. When the jinrikisha was put on sale by an ice cream vendor who pulled his ice box along behind him on it, Meadows could not resist the temptation. Larry also works in the Computer Department and Annette is scanner supervisor in Film Analysis.

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MAY FUN PARTY TONIGHT

Looking for a change of pace, then NALREC's May Fun Party tonight at the Village Barn is the place to be.

The event will run from 5:15 to 9:30 p.m., with live entertainment beginning at 6:30 p.m. Refreshments, including hot dogs and hamburgers, will be available as well as beverages. Everyone is invited, said Sharon Koteles, NALREC member.

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CREDIT UNION DECLARES 6.5 PERCENT DIVIDEND

The common share dividend for the first quarter of 1980 is 6.5 percent, the Argonne Credit Union announced. Share dividends on common shares are calculated each day rather than on the low balance each month or quarter, the practice of most banks and other financial institutions.

A branch of the credit union is located at Fermilab, CL1-W, next to the Medical Department.

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