

# The Village Friend



fermi national accelerator laboratory

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...M. S. Livingston...

## PHYSICS PIONEER TRACES CYCLOTRON GROWTH

"Cyclotrons and How They Grew" was the title of a special colloquium at Fermilab March 17, by Dr. M. Stanley Livingston. A high energy physics pioneer, Dr. Livingston is director emeritus of the Cambridge Electron Accelerator. He served as Associate Director of the National Accelerator Laboratory (now Fermilab) from 1967 until his retirement in 1970.

Dr. Livingston's career began under E. O. Lawrence at the Berkeley, California laboratory which Lawrence headed. Dr. Livingston was associated with Lawrence in the original development of the cyclotron. He went on to many other particle accelerators and introduced a number of new concepts into particle acceleration over the years of his distinguished career. He is the author of many books which have become basic texts for students of particle accelerators.

Dr. Livingston's visit was hosted by the Fermilab History Committee, another in a continuing series intended to recapture the historical events and flavor of the development of particle accelerators. Dr. Livingston spoke to a meeting at Fermilab and his informal remarks during a luncheon that followed were taped for permanent inclusion in the archives of the History Committee.

According to Dr. Livingston, three major innovations advanced accelerator development. They were: Lawrence's principle of cyclotron resonance; E.M. McMillan's theory of phase stabilization using radio frequency, and discovery of alternating gradient focusing.

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## VILLAGE GETS SITE PATROL OFFICE

To better serve Village residents, Emergency Services has opened a Site Patrol Office at 34 Sauk. Bob Armstrong, chief of security, said the sub-station at the former fire department dormitory, will provide most services offered at the Central Laboratory headquarters. For example, officers will assist employees, users and visitors with accident reports, theft reports and vehicle sticker applications.

Officer in charge is Capt. Glen Carl, on-site administrative assistant for the Laboratory's security contractor. Carl can be contacted at Ext. 3430 during business hours. After 5 p.m., call Ext. 3414. The new office replaces Site Patrol quarters at Site 55 on Eola Road, which have been closed.

Armstrong added that the new office will also house Emergency Services' investigative unit. Members, all Laboratory employees, are: Capt. Tom Fredrich, Capt. John Hays, Capt. Buzz Jeffries and Capt. Hank Prokop.



FERMILAB ARTS SERIES PRESENTS

"Sizwe Bansi is Dead"

A Goodman Theatre Stage 2 Production

8:30 p.m.

Saturday, April 29

Fermilab Auditorium



Reserved seat tickets are available for "Sizwe Bansi Is Dead," a play about contemporary life in South Africa.

The drama has been called a meeting of political art and dramatic genius. Hailed by The New York Times as a "joyous hymn to human nature," the production is directed by Gregory Mosher and features Meshach Taylor in the roles of Styles and Buntu, and Lionel Smith as Sizwe Bansi.

Three Joseph Jefferson awards, Chicago's top theatrical honor, for best actor, best director, and best production, were won by the play.

The story is about a black laborer who considers changing identity papers with a man he finds dead in the street in order to better his condition. But the laborer hesitates to make the switch; by destroying his real identity, in which he takes pride and comfort, he sees the act as a kind of suicide.

The program is funded in part by the Illinois Arts Council, a state agency, and by the National Endowment for the Arts, a federal agency. The play is among three to be performed in 25 communities during the IAC's 1978 Theater Tour program.

Tickets are \$3. For information, contact the Guest Office, CL-1W, Ext. 3440.

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TORNADO ALARM TEST FRIDAY

Tornado season is here again! A test of the internal tornado warning alert system in the Central Laboratory, Phillips Farm, and Industrial area will be made

*Friday (March 31) at 9:30 a.m.*

This is only a test; no evacuation will be made. Outlying alarm systems will be tested Tuesdays at 9:30 a.m. throughout the tornado season. "We have re-run the Tornado Preparedness Plan for use of people at Fermilab," John McCook points out. "It may be useful for home emergency preparations as well," he notes. The emergency plan is being distributed with this issue of the Crier. Extra copies are available in the Public Information Office.

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COMPUTER EXPERT VISITS FERMILAB

Almost snowbound at Boston a second time, Dr. Joseph Weizenbaum jettied out just ahead of a gathering storm to speak at Fermilab Mar. 17. "Can Computers Be Trusted?" was his topic. A computer science professor at Massachusetts Institute of Technology, he appeared as the fifth speaker in the 1977-78 Fermilab Arts and Science Lecture Series. The original lecture date--Jan. 20--was canceled due to the blizzard of '78. Photo at right: J. Weizenbaum (L), J. Appel of Fermilab Auditorium Committee.



Copies of the 1977 annual report of Universities Research Association, Inc. are available in the Fermilab Public Information Office. The report summarizes the major accomplishments at Fermilab during 1977 as well as the status of problems and projects involving work at Fermilab. URA's annual reports are prepared as information guides for the corporation's 53 member universities.

The report opens by saying, "The past year has been a scientifically exciting one at Fermilab with major new discoveries in particle physics and with important advances in accelerator technology."

In the section reviewing the experimental program URA notes:

*"Indicative of the severity of the cutbacks caused by insufficient funding, only 15 new proposals, exclusive of bare emulsion exposures, have been approved this year, while at the same time 9 approvals already given have been withdrawn so the net for the year including simple emulsion exposures is an increase of only 6 in the total number of approved experiments. This cutback inevitably has major implications for the scientists who use the Fermilab facilities."*

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J. Cronin



H. Stever



R. Williams



H. Woolf

#### NEW URA DIRECTORS

A former Fermilab physicist is among four new trustees elected to the board of Universities Research Association, Inc. Members of the URA Council of Presidents, representing 53 member universities, elected new board members prior to the trustees' meeting Feb. 16-17. New trustees are:

James W. Cronin, professor of physics, Enrico Fermi Institute, University of Chicago, and former head of the Fermilab Colliding Beams Experiments Department; H. Guyford Stever, scientific consultant, former director of the National Science Foundation and former science advisor to the President; Robert W. Williams, professor of physics, University of Washington-Seattle; and Harry Woolf, director, Institute for Advanced Study, Princeton, N.J.

Harold K. Ticho, professor of physics and dean of the physical science division, University of California-Los Angeles; Wolfgang K.H. Panofsky, director, Stanford Linear Accelerator Center; and G. Arthur Webb, president emeritus of the Carnegie Mellon Institute for Research were re-elected as trustees. Members were elected to three-year terms. Drs. Stever and Woolf are members-at-large; Drs. Cronin and Williams are regional representative members.

In a special resolution, the Presidents' Council cited retiring board member Dr. H. DeWolf Smyth of Princeton. Their tribute read: "The Council of Presidents expresses its deep appreciation to Henry DeWolf Smyth for the exceptional nature of his contributions to Universities Research Association. From December 1965 to February 1978 as chairman of the Board of Trustees for the first four years of URA activity and as a member of the board of trustees for the entire 12 years of its history to date, he served with dedication and distinction. His insight and understanding clearly enhanced the quality of corporate judgment throughout the period of his long association. February 2, 1978."

Other retiring trustees were Dr. A.B. Weaver, executive vice-president, University of Arizona; Dr. Gertrude S. Goldhaber, physicist, Brookhaven National Laboratory; and Dr. D. H. Miller, professor of physics, Northwestern University.

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### POWELL WINS SCOUTING AWARD

Boy Scouting's highest service award--the Silver Beaver--has been won by George Powell, senior technician in Neutrino's mechanical support group. The surprise presentation was made at the 1978 banquet of the West Suburban Council. A 35-year scouter, Powell was among five Silver Beaver award recipients. He has been active in 13 different scouting capacities in the Hinsdale area. His wife, Ruth, and their four sons, George, Jr., Thomas, Martin and Jeffrey are also active in Scouts.

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...Ruth, George Powell...

### MICROFILM FOUND

Two packages of microfilm were inadvertently left in Duplicating. The owner can reclaim it there by contacting Sybil Krebs.

ALSO NOTE: The Duplicating Facility will be closed for two days -- Friday, April 7 and Monday, April 10 -- during construction. The xerox copying machine in the entrance room area will be available during those two days, however.

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### EMPLOYEES WIN PRIMARIES

Two Fermilab employees emerged victorious in primary elections held last week. They were Penelope Horak, assistant director-Technical Services Division and Ronald Smith, a designer in Accelerator mechanical support. Horak, running unopposed for the Democratic nomination as DuPage County treasurer, garnered 8,481 votes. Smith, seeking the post of Milton Township Republican State Central Committeeman, upset a four-term incumbent. Smith won over William Ives 19,209 votes to 17,733. In politics for 20 years, Smith first attained office in 1967 when he was appointed Milton Township committeeman.

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### MUSIC CLUB SPRING DANCE

The Fermilab Music Club will hold its annual spring dance Saturday, April 1, from 9 p.m. to 3 a.m. in the Village Barn. The dance will feature W.B.M.X. Disc Jockey Graham Armstrong. All Fermilab employees and their guests are invited. Contact Joyce Curry, Ext. 3415, Mike Armstrong, Ext. 3014, or any club member for tickets at \$2 each -- only 300 available.

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### ART DISPLAY: 30's PHOTOS TO 70's ABSTRACTS

Depression-era photography joins abstract geometric oil paintings in Fermilab's latest art display in the Central Laboratory second floor lounge. Angela Gonzales, Fermilab art and design assistant, is the artist exhibited. Her first exhibit here includes 16 pen and ink drawings plus 14 colorful abstracts created over the last 10 years. Ms. Gonzales, an 11-year Fermilab employee from Oak Park, came here from Cornell University where for seven years she translated scientific ideas and concepts into sketches, drawings and models. She is a graduate of the Hochschule fuer Bildende Kuenste in Berlin, Germany. There she studied painting, design, sculpture, theory of these and history of art, as well as general history and literature.

Walker Evans (1903-1975) is renowned for "people" photos he made as an employee of the Farm Security Administration during the depression. Twenty-nine of his documentary portraits in black and white are now on display at Fermilab.