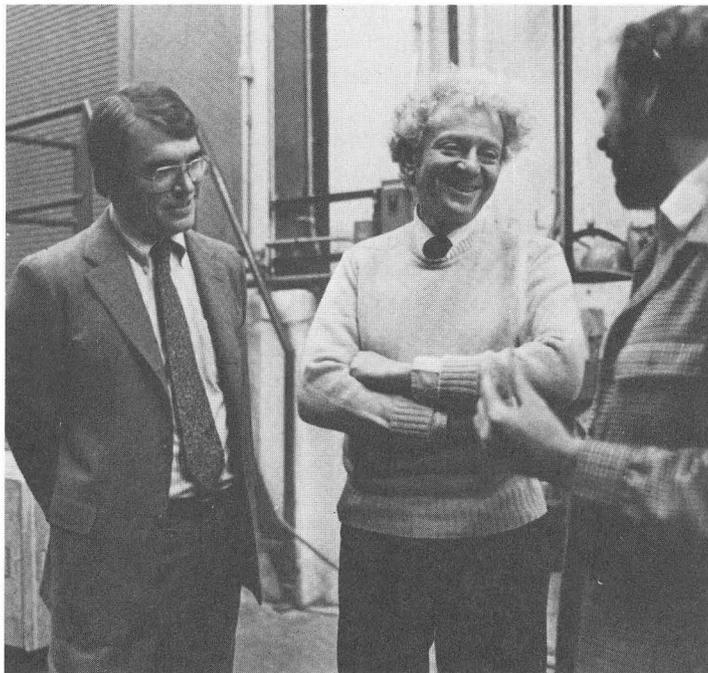


## USERS TO MEET SOON



*Dr. George Keyworth (left), Science Advisor to the President and Director, Office of Science & Technology Policy, with Fermilab Director Leon Lederman and Dr. Frank Taylor of Massachusetts Institute of Technology, Secretary of the Users Executive Committee.*

### by Phyllis Hale

Dr. George Keyworth, the President's Science Advisor, will speak at the Annual Fermilab Users Meeting, which is to be held Friday and Saturday, April 27 and 28. Keyworth's talk is scheduled for 4 p.m. Friday in Ramsey Auditorium.

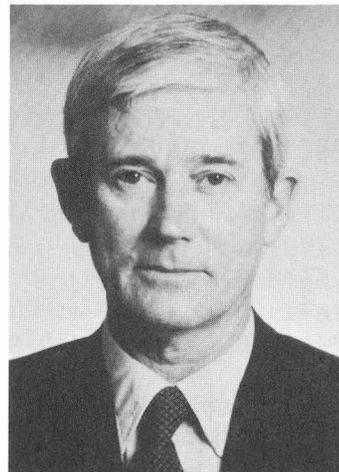
Keyworth has been President Reagan's Science Advisor for almost three years and, as such, exerts considerable influence on the funding of high-energy physics laboratories, including Fermilab. As a nuclear physicist who headed the Experimental Physics Division at Los Alamos National Laboratory before going to Washington, he is well aware of the country's need for substantial budget growth in science, and feels that "science has an important role in national policy." According to a recent article in the Chicago **Tribune**, Keyworth is quoted as saying, "We tacitly accept the pursuit of science as art--science for

science sake as ample justification, but it is not ample. We have to realize that American pre-eminence in science is a critical element in the future of the country."

Another guest speaker at the Annual Meeting is Dr. Alvin Trivelpiece. Trivelpiece is the Director of Energy Research for the U.S. Department of Energy. Regular attendees of the Annual Meeting will recall that Trivelpiece was a guest speaker in 1983 when he spoke on DOE's FY'84 science budget. Stewart Loken, Lawrence Berkeley Laboratory, this year's Users Executive Committee Chairman, hopes that "Dr. Trivelpiece can shed some light on the competition for funding of various programs."

Other items on the Friday agenda include talks by Director Leon Lederman concerning the State of the Laboratory and a URA report by URA Chairman, Guy Stever. Talks will be given on Fermilab's computer needs, operation of the Saver, and TeV II plans and the running schedule. Robert McCarthy, of Stony Brook and a UEC member, will give "An Experimenters's View of the Energy Saver." Time will be available for open discussion during the meeting.

Saturday morning's meeting begins with the "Commissioning of the Energy Saver" (Chairman Loken recalls that "Last year's Annual Meeting focused on the first attempt to inject beam. This year we are commissioning the Saver!") There will be a report on "The TeV I Project," as well as proton-antiproton physics discussions. Users will be given a glance into the future with a talk by *Alvin Trivelpiece* J. D. Bjorken on "The Next Three Years."



Copies of the agenda or more information are available from the Users Office, WH1E.

# GRANT AWARDED FOR SCIENCE VIDEOTAPE LIBRARY

If you are not sure you can tell the difference between a "Quark" and a "Lepton," you will soon have a place to find out.

Science students, and the general public in northern Illinois, will have access via videotape to lectures and demonstrations by some of America's top high-energy physicists, as a result of a grant from The Aurora Foundation.

The \$12,800 grant to the Friends of Fermilab Association will be used to establish a science education videotape library of programs produced here.

The first project of the "library" will be the production of ten one-hour videotapes documenting the highly successful **Fermilab Saturday Morning Physics** program. The grant will cover the cost of production, editing, distribution, and program evaluation.

The videotapes, which are intended to serve juniors and seniors in high school science classes, and undergraduate science majors in area colleges and universities, will be distributed through regional library systems at no cost to the recipients. All area two- and four-year colleges and universities will also receive a set of the tapes. They will also be available to the general public through the library systems.

The **Saturday Morning Physics** program is held three times annually. Selected area high school students who have demonstrated exceptional ability in mathematics or the physical sciences are invited to participate. Since its founding four years ago, more than 900 students have "graduated" from the program, many of whom have gone on to higher education in the science or mathematics fields.

"Each year the increasing popularity of the **Saturday Morning Physics** program has made it more and more difficult to accommodate the number of interested and qualified students," said Stanka Jovanovic, President of the Friends of Fermilab Association. "By videotaping the program lectures, we hope to extend the impact of the program to those students who would

otherwise not have access to materials of comparable quality or content.

"Videotaping will also permit the introduction of animated graphic simulations and camera interviews with the scientists. These techniques will enhance audience comprehension and recall of important lecture elements," she added.

The ten lectures in the **Saturday Morning Physics** series include topics as "How do we make particles?," "Quantum Theory," and "Leptons and Quarks." They are delivered by some of the top scientists in the field of particle physics who work at the laboratory.

The videotapes will also take viewers to various parts of the Laboratory site. Viewers will see the accelerator, the E-605 experiment in the Meson Lab, the 15-ft bubble chamber, and other of Fermilab's specialized facilities.

"We are especially excited about the potential for this videotape library," said Aurora Foundation Distribution Committee Chairman John F. McKee, II.

"The Aurora Foundation has a long tradition of supporting educational programs and this is one of the best we have seen. By capitalizing upon the extraordinary concentration of scientific talent and fine facilities available at Fermilab, this program will encourage many young people to pursue careers in science. It is another example of the leadership role that the greater Fox Valley area is playing in the development of the high technology future of Illinois.

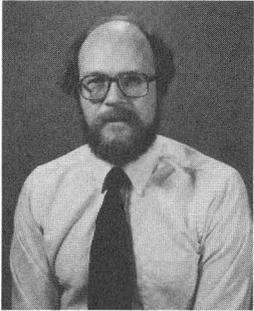
"We salute the Friends of Fermilab for their leadership role in extending the impact of this unique facility into our children's classrooms," he concluded.

The Aurora Foundation, established in 1948, is a tax exempt Community Trust which accepts gifts of cash or property in the form of bequests, contributions or memberships from area citizens. The Aurora Foundation, in turn, distributes funds from those sources and from the earnings on its investments to worthy community organizations and projects based upon a careful assessment of community needs.

# ARTIFICIAL INTELLIGENCE EXPERT TO SPEAK HERE MAY 4

by Jane Green

Today, computer scientists are designing computer systems which can converse with people in human languages, learn from experience, and apply that experience in making decisions. What impact will such systems have on our society? How will they affect our conception of ourselves? Dr. David L. Waltz, who is Research Professor at the University of Illinois Coordinated Science Laboratory, will address these questions in his talk, "Artificial Intelligence, Society and the Individual." He will lecture in Ramsey Auditorium on Friday, May 4, 1984, at 8 p.m.



David L. Waltz

Waltz earned his doctorate in electrical engineering from the Massachusetts Institute of Technology in 1972. A year later he joined the faculty of the University of Illinois at Urbana-Champaign where he is Professor of Electrical Engineering. As Research Professor at the University of Illinois Coordinated Science Laboratory, Waltz has been investigating the utilization of existing spoken languages as a means of instructing computers. His previous research efforts have included the design of a touch-sensing system for robot hands.

Professor Waltz's lecture will offer an analysis of artificial intelligence including how our self-concept is affected by it. He will look at the ways in which artificial intelligence is affecting society today and the further social changes that will be brought by the achievement of practical artificial intelligence.

Admission to this Lecture Series presentation is \$2, \$1 for senior citizens, and tickets are available at the Information Desk in the atrium of Wilson Hall, ext. 3353. Phone reservations are held for five days, those reservations not paid for within five working days will be released for sale.

## Aurora Blood Bank Here May 1

The next Aurora Blood Bank Drive will be held Tuesday, May 1, in Conference Room 1 West from 9 a.m. to 2 p.m. For information please call ext. 3232.

## 'STAR WARS: PROMISE & PROBLEMS'

"Stars Wars: Promise and Problems" will be presented by Dr. Richard L. Garwin as part of the Arms Control and International Security Lecture Series at 8 p.m., Thursday, April 26, in Ramsey Auditorium.

Garwin is one of the nation's foremost experts on national security. A native of Cleveland, he received his Ph.D. from the University of Chicago and was on their faculty for three years.

He joined the IBM Corporation in 1952. In addition to his IBM affiliation, he is Adjunct Research Fellow in the Kennedy School of Government, Harvard; Andrew D. White Professor-at-Large, Cornell University; and Adjunct Professor of Physics at Columbia University. He has been Director of the IBM Watson Laboratory, Director of Applied Research at the Watson Center, and a member of the IBM Corporate Technical Committee. In addition, Garwin is a consultant to the U.S. government on matters of military technology and arms control.

Garwin has been involved in the design of nuclear weapons, in instruments and electronics for research in nuclear and low-temperature physics, in computer elements and systems including superconducting devices, in communication systems, in the behavior of solid helium, in the detection of gravitational radiation, and in military technology. He has published about 100 papers and been granted 27 U.S. patents. He is co-author of the books **Nuclear Weapons and World Politics** (1977), **Nuclear Power Issues and Choices** (1977), **Energy: The Next Twenty Years** (1979), and **Science Advice to the President** (1980).

The "Star Wars" concept, first announced in March 1983, proposes a multi-billion-dollar missile defense for the U.S. using a defensive nuclear umbrella in outer space. The concept is the subject of debate both inside and outside the

(cont'd. on pg. 4)

# DIRECTOR APPOINTS HINES, LOCKWOOD OMBUDSPERSONS

Jack Lockwood, Accelerator E/E Support, and Carolyn Hines, Communications Services, have been appointed to serve as Ombudspersons for an 18-month term, ending September 1, 1985. They replace Rupert Crouch and May West who have served as Ombudspersons for a year-and-a-half.

The Ombudsperson position at Fermilab was established as a means to facilitate and improve communications within the Laboratory. In essence, Carolyn and Jack will listen to problems of employees and attempt to open up channels of communication that will ultimately lead to just and viable solutions. Jack can be reached on ext. 4459 and Carolyn on ext. 3788.

## GARWIN TO LECTURE ON STAR WARS

(cont'd. from pg. 3)

government. Garwin is a member of the panel of the Union of Concerned Scientists that recently released its study of the Stars Wars plan.

The public is invited to attend this lecture. There is no admission charge and no advance reservations are necessary.

## STOCKROOMS TO CLOSE FOR INVENTORY

Site Stockrooms located in the Wilson Hall Catacombs and the Site 38 Warehouse will take annual audited inventories the week of May 14-18, 1984.

The Wilson Hall Stockroom will close May 14 and 15 while the Stockroom at Site 38 will close May 16-18, 1984.

"To maintain service continuity, one Stockroom will make **emergency**, and I emphasize **emergency**, issues while the other undergoes inventory," said Gene Guyer, Stores Management Supervisor.

## EQUIPMENT INVENTORY NEEDS SUPPORT

The Property Management Office of Support Services is starting the cyclical inventory of capital equipment throughout the Laboratory. Assistance on everyone's part, especially opening cabinets, showing hidden locations, will be appreciated.

This inventory of capital equipment is a contract requirement, but, perhaps more importantly, it helps the Property Office assist you if you are looking for a piece of equipment for short term use, or if a piece of your equipment has strayed.

Fermilab is operated by Universities Research Association, Inc. under contract with the U. S. Department of Energy. Ferminews is published by the Publications Office, P. O. Box 500, Batavia, IL 60510, phone (312) 840-3278.



Carolyn Hines and Jack Lockwood

The guidelines for the Ombudspersons say that an "ombudsperson has authority to investigate all complaints or irregularities, generally has access to necessary information, and should have the cooperation of all staff members. The ombudsperson will, when requested, protect the confidentiality of information that is made available.

It is envisioned that, after properly investigating complaints, rumors, misunderstandings, and/or irregularities, the ombudsperson will develop recommendations for the resolution of the problems which have been referred to him/her, preferably through normal channels. Recommendations can be made at whatever levels seem appropriate, up to and including the Directorate. Ombudspersons are appointed by the Director and Deputy Director and report to them.