

“Fireside Chat” Sheds Light on Lab’s Future

It was called a “Fireside Chat with the Director,” and it lived up to the billing. At an informal, relaxed give-and-take sponsored by the Physics Section on July 12 in Ramsey Auditorium, Fermilab Director John Peoples and Fermilab physicists exchanged views and cast some illumination on the Laboratory’s current situation and future directions.

This was the first in a planned series of meetings between Peoples and elements of the Fermilab community, including “Director’s Meetings” with Division and Section heads and their department managers.

Peoples cited the Laboratory’s “superb accelerator and excellent physics program,” and invited attendees to think about Fermilab’s long-term future. He noted that the recent Physics Advisory Committee’s General Remarks and Recom-

mendations (see the upcoming May/June *Fermilab Report*) showed the committee to be impressed with Fermilab’s year and encouraged by the Lab’s long-range plans, while at the same time conveying the members’ concern with getting results from previous fixed-target runs out more quickly. Peoples stated that the Lab must “make a commitment to get fixed-target data analysis done,” and also set preparations for the Lab’s upcoming fixed-target run as a top priority, while keeping the D0 Experiment on a timely schedule with the intent of lining D0 and the Collider Detector at Fermilab (CDF) up for concurrent and successful runs, with both experiments projected to run well into the future.

After pointing out that the Lab’s FY1989 budget is under control, Peoples moved on to FY1990 monies, saying that while the House of Representatives had left the Lin-

ac upgrade appropriation of \$4.7 million “unscathed,” Fermilab’s overall budget (if the House version of the DOE Appropriations Bill defines our budget) then will be \$13 million less than the President’s request for FY90 due to reductions needed to meet mandated guidelines. In that event, “We can do as we have done in the past,” he said. “Struggle by. We see no need for staff reductions.”

Peoples called the Linac upgrade a “very, very significant start on a program that will keep us at the center of high-energy physics for the next decade or so.” The Main Injector proposal (to build a new ring to replace the current Main Ring), which won support at the recent High Energy Physics Advisory Panel meeting, is “passing through a few hurdles, and DOE has asked us for a technical review.”

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Five Fermilab Staffers Are Rewarded for Their Energy-Conservation Ideas

Since 1976, rates for the electricity Fermilab uses to power its research equipment have increased by 300 percent and are projected to increase by another five percent in 1990. Energy management and conservation is therefore of great importance to the Laboratory.

Over the past eight years, several millions of dollars in funding have been approved by the Department of Energy (DOE) for Fermilab’s in-house energy management (IHEM) retrofit projects. Two of the FY90 retrofits result from suggestions to the Lab’s Employee Energy Conservation Awards Program (EECAP). Since last Octo-

ber, when the EECAP cash awards amount was upgraded, 35 employee suggestions have been received. In January of this year, three employees received a total of \$4925 for suggestions which produced annual energy-cost savings of \$130,000.

On July 20, five Fermilab employees received a total of \$13,300 for suggestions which will result in energy cost savings estimated at \$510,000 annually. The latest EECAP winners were feted at a luncheon where Associate Director for Technology Dennis Theriot presented awards. Also attending the luncheon were Fermilab Director John Peoples; Andrew Mravca, DOE

Batavia Area Office (BAO) Manager; Norman Hanson of BAO; Ado Adami, DOE Chicago Operations Office Energy Management Coordinator; Fermilab Energy Management Coordinator Bill Riches; members of the EECAP committee; and the awardees’ supervisors.

Bob Vanecek (*Accel. Div./HQ Staff*) received a \$400 cash award for his suggestion to install lighting controls in the Booster East and West towers to reduce operating time from 168 hrs./wk. to 50 hrs./wk. Projected cost savings are \$4000 per year. The suggestion will be included in the FY1990 IHEM.

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 **Fermilab Arts Series**

The harp may be the oldest of instruments, but today some of the newest of sounds are coming from this handsome, multi-stringed instrument. **Straight from the Harp** will feature the talents of the hypnotic Paraguayan harpist Alfredo Rolando Ortiz; the sparkling clar-sach players of Sileas, Scottish harpers Mary Macmaster and Patsy Seddon; and the exotic, gutsy playing of jazz harpist Deborah Henson-Conant. Savor the versatility of the harp on August 26, 1989, at 8:00 p.m. in Ramsey Auditorium.

This evening odyssey with the harp begins with the Arpa Paraguaya, the national instrument of Paraguay, made of wood and sporting 36 nylon strings. Alfredo Rolando Ortiz has been internationally recognized for his virtuoso command of this instrument. In his relaxed, informative way, he captivates audiences with dazzling glissandos and pizzicatos, vibrant Latin American rhythms, and the many rich tone colorings he is able to express. The inventive Scottish duo known as Sileas (pronounced sheelis) has "earned a firm place in the hearts of music lovers everywhere" by pushing harp playing to



new boundaries. Mary Macmaster plays a crisp, brilliant-toned metal-strung harp, along with Patsy Seddon on the warmer, mellower-toned gut-strung harp.

Pipe and fiddle tunes, and Scots and Gaelic songs, are among the wealth of Scots/Celtic music they have sensitively arranged for their harps. A "lady to watch out for," a harp pioneer who "indubitably has star quality," Deborah Henson-Conant has won accolades around the world for her delicate new spin to jazz standards and original compositions. Her Jazz Harp Trio (harp, bass and drums) completes our harp showcase with a bit of the exotic. As one critic commented, "It is a bit of a shock to hear the harp, usually relegated

to the back row of a large orchestra, become a dominant jazz instrument." Ms. Henson-Conant has amazed many people with her broadcasts on network television, Public Radio, the BBC, the Voice of America, and MonitoRadio.

Hear the latest sounds of the harp, *Straight from the Harp*, for an \$11 admission. Reserve your tickets by calling ext. ARTS weekdays between 10:00 a.m. and 12:00 noon, or 1:00 p.m. and 4:00 p.m. Reservations are held for five days, but due to ticket demand those not paid for within five working days will be released for sale. - *Tammey Kikta*

New Book Available from Public Information

The book *Particle Physics in the Cosmos*, co-edited by Dick Carrigan, of Fermilab's Office of Research and Technology Applications, and Peter Trower of Virginia Tech, is available for purchase at \$9.95 from the Public Information Office (WH 1W). This innovative collection of 12 articles from *Scientific American* explains the physical universe by linking the physics of elementary particles to our knowledge of the cosmos. Among the topics covered are the problem of dark matter and its role in the

Universe; the search for a theory to unify the four forces of nature; and the various experimental proposals to find the elusive unstable protons and magnetic monopoles. The editors have added postscripts to the articles, thus making the essays fully up to date.

- *Barbara Lach*

Estimated percentage of all scientists who ever lived who are alive today: **85**

Percentage of tropical-fish owners in Iowa who would like their fish to be more affectionate: **40**

- *Harper's Index*

 **The International Film Society Presents:**

The Exterminating Angel, an allegory about the savage interiors of a group of upper-class dinner guests who discover that they cannot leave the room they are in. August 11 at 8:00 p.m. in Ramsey Auditorium.

Wish You Were Here, in which a 16-year-old girl copes with her mother's death. August 25 at 8:00 p.m. in Ramsey Auditorium.

Admission is \$2 for adults, \$.50 for children 12 and under.

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Addressing the issue of Fermilab's relationship to the Superconducting Super Collider, Peoples called Fermilab the “source for superconducting-accelerator technology,” and that while Fermilab's “first objective in the next six years is to get physics out of our programs, the Lab should begin considering SSC-related options, for instance, should some fraction of the Lab's scientific staff work on an SSC detector as an institutional commitment, and if so, should the Lab pursue generic or specific detector technology?”

There followed a lengthy give-and-take that emphasized management's desire to reach out to the Lab's scientific community for consensus. Peoples proposed establishing three committees: one to look into future accelerators; one to explore the issue of Fermilab participating as an institution on experiments at other labs, most notably at the SSC; and one to explore non-accelerator physics undertakings at the Lab.

The upcoming meeting on “Physics at Fermilab in the 1990s,” to be held on August 15-24 in Breckenridge, Colorado, will, Peoples said, have a major impact on Fermilab's future plans, and he encouraged attendance. Dan Green (*Physics Department*) remarked that pre-registration for the Breckenridge meeting was exceeding expectations.

“The physics opportunities at Fermilab in the late 1990s are well supported,” Peoples said, “and we must begin planning our future.”

* * * *

Peoples' remarks were interspersed with impromptu reports from, among others, Gerry Dugan (*Accelerator Division*), Ray Stefanski (*Research Division*), Alvin Tollestrup (*CDF*), and Paul Grannis (*D0 Experiment*).

Dugan qualified the June accelerator studies as “very encouraging.” Protons and antiprotons were put on separated orbits, allowing independent tune control in order to reduce beam-beam interaction. (In separated orbits, 44 bunches of protons and antiprotons are each placed on a “corkscrew,” resulting in precise interaction at only two places.)

Beam was ramped to 10^{21} GeV in F-Sector, and dispersion in the Main Ring WQ 44 quadrupoles was lowered by 20 percent, promising improved operation during the next run.

Accelerator Division's goal for the next Collider run is 5×10^{31} initial beam, three times higher than that produced in the Collider run that ended on June 1. The Accelerator Division hopes to deliver 20 inverse nanobarns to the Colliders.

“Awards” continued from page 1

Ron Grosklaus' (*Bus. Serv./Emer. Serv./Fire Department*) cash award of \$500 was for suggesting the installation of lighting controls in Labs E and F to reduce operating time from 168 hrs./wk. to 84 hrs./wk. at a projected cost savings of \$5000 per year. The suggestion will be included in FY1990 IHM retrofit project.

Bill Byrd (*Bus. Serv./Fac. Ops./Elect. Shop*) received a cash award of \$1250 for his suggestion to revise lighting and install lighting controls on Wilson Hall's 16th floor, ground floor, basement, and Auditorium backstage where lights now are operating 24 hrs./day. Cost Savings: \$15,000/yr. The project is funded for implementation, with design and construction to be completed during the next few months. (This is Bill's second award. In January, he received a \$3550 award for his suggestion for site-wide gradual conversion to energy-efficient fluorescent lamps

and ballasts, which is presently being implemented.)

Joe Pathiyil (*Res. Div./EE Dept.*) received a total of \$6150 for four suggestions: 1) Lab NWA - Conversion from fluorescent to metal halide lighting fixtures plus lighting control to reduce operating hours by 50 percent. Cost savings: \$9400/yr. 2) Lab NWA - Conversion from electric to natural gas radiant heating. Cost savings: \$23,000/yr. 3) Labs C and D - Conversion from electric to natural gas radiant heating. Cost savings: \$26,000/yr. 4) Labs MP and MW - Conversion from electric to natural gas radiant heating. Cost savings: \$28,000/yr. All four suggestions are included in FY1990 retrofit projects.

James Morgan (*Accel. Div./Operations*) received a \$5000 cash award for his suggestion to reduce accelerator ramping level during periods when there is no beam. Projected cost savings: \$400,000/yr. This suggestion was successfully implemented at no cost during the last few weeks of the Collider run and is expected to be utilized during the upcoming fixed-target run. This is the first employee single suggestion to receive the maximum cash award.

Other employee energy-conservation suggestions are still being evaluated for potential cash awards to be presented at the next awards luncheon in January 1990. Suggestion forms may be obtained from Phyllis Hook, WH 4 Cross-over, ext. 4637. - Bill Riches

Portion of all oil produced worldwide that is used for transportation in the United States: 1/5

Average number of times an American opens the refrigerator door each day: 22

Estimated increase, since 1982, in the temperature of the world's oceans: 1.2 degrees

- Harper's Index

Trudy's News from NALREC

Hi again. The big news is the Taste of Fermilab, which will take place around the Village Barn on Friday, August 11, beginning at 4:30 p.m. and running to 10:00 p.m. This is a new event that NALREC is trying in lieu of the Family Picnic. Folks do not seem to be as excited about picnics as they once were, so... Taste of Fermilab was born. We hope you will join us at the Taste and have as much fun as we had planning it.

We are going to have that great band, Burgundy Road (they played at the last NALREC dinner dance). We'll be featuring "Collider Coladas" as our special drink of the day. Edibles will be along the lines of "P-Bar Hot Dogs," "Big Bang Hot Dogs," "Top Quark Potatoes," "Booster Brats," "TEVA-TRON Tacos," and last but not least, "URA Beef." (No "Linac Linguini" or "Z⁰ Zuchinni"?)

Interactions & Events

et al.

Luann O'Boyle (*Res. Div./ACP*) recently completed course work and tested to achieve certification as a Certified Professional Secretary (CPS). Luann began her studies in September 1988 with review classes including Behavioral Science, Business Law, Economics and Management, Accounting, Office Administration and Communication, and Office Technology. She attended classes at Elgin Community College and Tested at the College of DuPage.

Luann first heard of CPS Certification while attending a workshop at Harper College. "Trends in industry and advances in technology have made the requirements for a secretary more than just answering the telephone and typing,"

The swimming pool will be open, and pickup volleyball or baseball games are welcome (no tournaments). I've also heard rumors about the infamous dunk tank and "adult games" featuring "Lepton Limbo" and "Photon Balloons," whatever that is. We'll have prizes for the games as well as a raffle.

We hope that employees, visiting scientists, and Security contractors, and the families of all the above, will join us for our first Taste of Fermilab. For more information, please call me at ext. 3228.

Thanks to Tom Regan and Mike Urso for a great Hard Times Party. Joe Morgan wants me to let you know that he cannot get any tickets to Cubs games, and the trip to the Bears-Lions game in Detroit is sold out.

NALREC is looking into a Lake Michigan cruise, and an outing to Maywood Race Track. Watch this space. - *Trudy Kramer*

Luann said. "I felt that I wanted to increase my skills and knowledge in order to become a more valuable employee."

Networking with other secretaries was an added benefit of the course, as were insights into the employer's viewpoint on legal limitations, budgeting, and management. - *Stephanie Novack*

Congratulations to:



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