

# Robert Wilson Receives Enrico Fermi Award

It has been announced by U.S. DOE Secretary Hodel that Director Emeritus Robert R. Wilson will receive the prestigious Enrico Fermi Award, the Department of Energy's highest scientific honor, for his "outstanding contribution to physics, particle accelerator design and construction."

Dr. Wilson shares the prize for exceptional scientific and technical achievement in the development, use, or control of atomic energy with Dr. Georges Vendryes of the French Commission on Atomic Energy. Both men will receive a Presidential Citation, a gold medal, and \$100,000.



*Director Emeritus Robert R. Wilson*

**November 29, 1984**

**FERMI NATIONAL ACCELERATOR LABORATORY**

## **TEV I MAGNET MEASUREMENTS NEARLY OVER**

**by Bruce Brown**

The capabilities of the Magnet Test Facility (MTF) are being fully utilized these days to assure the quality of the magnets for the Tevatron I project. The major thrust is devoted to the measurements on the four magnet types which provide the bending and focusing for the two ring antiproton collection and storage system. But also arriving this month are the special Main-Ring magnets for the D0 overpass and the F17 extraction area, a few replacement spool piece correction magnets for the Tevatron, and the first correction dipoles for the antiproton debuncher and accumulator rings. Measurement activities must include routine measurements on each of the more than 400 production magnets, a collection of special calibration and quality checking runs and various special tests. Together these demonstrate that all steps of the fabrication and assembly required for these magnets are well understood so that the storage rings assembled from them

will successfully store the antiprotons for up to a day.

The production testing facility for TeV I magnets at MTF must provide measurements of the field shape to a part in 10,000 and measurements of the field strength to a few parts in 10,000. The system has been developed by a team from MTF and the TeV I Magnet group. The mechanical and electronic hardware choices have reflected the long experience by both groups from previous magnet building efforts at Fermilab. The software, on the new VAX11/730 computer, utilizes modern data base, data entry, and graphics tools to allow the measurers and the analyzers to concentrate on the job at hand: verifying the quality of the magnets.

The largest single group of magnets, the 243 small aperture quadrupoles, have been assembled (at the Paramount Park facility) and tests completed. From  
*(cont'd. on pg. 2)*

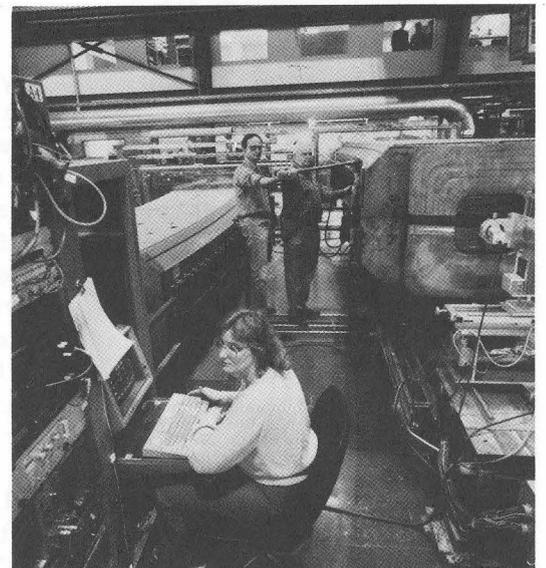
# *Fermi*News



*TeV I Magnet Measurement Facilities in Industrial Building #1. Above on the left a large aperture quadrupole is shown behind a debuncher trim dipole. On the far right is a dipole for the D0 overpass system. The MTF/TeV I personnel shown are left to right (first row) Al Wehmann, Fil Johnson, Nona Joerg, and Rose Broomfield; (second row) Butch Bianchi, Rodger Bossert, Greg Cisko, Kevin McGuire, Ed Schmidt, Dean Krause, Harold Stahl, Bruce Brown, and Ken Kaczar; (third row) Peter Mazur, Jim Garvey, Dave Hartness, Fred Wilson, Mike Roman, Ken Pinyan, Jim Pachnik, Rick Shenk, and Julian Plymale. (Not pictured are Shree Agrawal, Robert Barger, Keith Dillow, Steve Helis, George Kirschbaum, and Kathy Ohman from MTF and Mike Gormley, Dave Harding, Arlene Lennox, Dennis McConnell, Roy Meeks, Fred Mills, Bob Peters, Don Poll, and Tom Rathbun of TeV I.)*

one-third to two-thirds of the measurements are complete on the large aperture quadrupoles, the small aperture dipoles, and the large aperture dipoles. These tests continue along with such studies as magnet reassembly studies (the magnets must be assembled over the bakeable vacuum system), steel permeability studies of the most recently acquired steel and examination of the first four correction dipoles. Since installation of small quads has begun in the newly completed tunnel, we know we will be pushing hard to complete the testing program so that the magnet installation process can continue toward the goal of collecting the antiprotons needed for the TeV I colliding beams effort.

*Re-assembly tests for large dipoles at B0. LuAnn Smith, Jack Rosetto (left), and Bill Lord develop a magnet assembly procedure which guarantees reproducible fields upon magnet re-assembly for TeV I large dipoles.* →



# MOLINA'S SPANISH DANCERS SASHAY ON STAGE DEC. 1

by Harmon Greenblatt

An exciting evening of Spanish Dance is coming to Fermilab! Acclaimed by critics as "great virtuosos" and "dazzling," Jose Molina Bailes Espanoles will appear at Fermilab's Ramsey Auditorium on Saturday, December 1, at 8 p.m. This popular and multitalented company, consisting of dancers, guitarists, and a flamenco singer presents a marvelous evening of inventive choreography, splendid costuming, and fascinating music that has delighted audiences all over the world.

Spanish dance is one of the oldest ethnic dance forms in Europe and has evolved into several different styles, reflecting the different regions and cultures of Spain. Combining solid technique with dramatic flair, Jose Molina's company can convey the sensuality of flamenco as well as the quaint flirtatiousness of the regional dances. The fire, vigor, and precision of Molina's performers brings out the spirit of each individual dance while keeping the authenticity of the art form.

Born in Madrid, Jose Molina began dancing at the age of three. He began touring as a member of the Company of the "Soledad Miralles" when he was fourteen. Before long he was "renowned throughout Spain for his complete mastery of the Spanish Dance." Still in his teens, Jose arrived in the United States and appeared on the Steve Allen Show (now the Tonight Show) where he was seen by Jose Greco who invited him to join his company as first dancer. He remained with the Greco Company for five years and in 1962 decided to form his own company.

Don't miss Jose Molina Bailes Espanoles, a company which has been described as "a sparkling gem long to be treasured by devotees of the true Spanish dance." Admission is \$7, and tickets are available at the Information Desk in the atrium of Wilson Hall, ext. 3353. Phone reservations not paid for within five working days will be released for sale.



*Jose Molina Bailes Espanoles*

## EMPLOYEES WIN SOFTBALL LEAGUE

Congratulations to a highly talented team of players made up of a mixture of former Fermilab Bushwackers, Pleasure and Masterbatters. These dedicated individuals took the Batavia Park District Fall League "B" Division Championship and finished with a record of 15 wins and 4 losses. Players names are Dave Hanabarger (coach), Bob "Obie" Oberholtzer (most valuable player), Glenn Smith, Gary Andrews, Stan Boyson, Billy Smith, Marty Whitson, Jack McCarthy, Ray Fonseca, Kevin Callaghan, Lonnie Batchelder, Harlan Dick, Dan Fisk, Mike Wheeler, and Steve Gould.

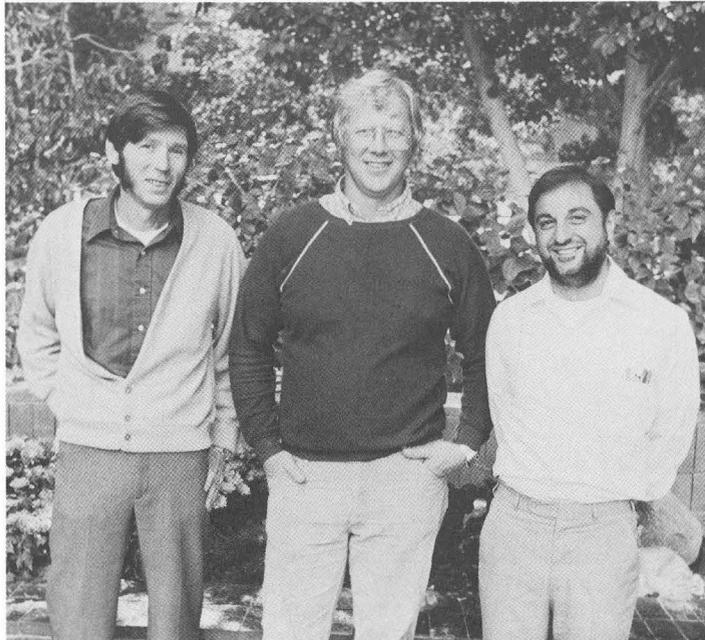
## Quality of Life Committee Seeks Books

The Quality of Life Committee is setting up a library in the Users Center. If you have any old books you would like to donate, drop them off in the Guest Office, WH-1E, or arrange to have them picked up (contact Avril Quarrie, ext. 3440).

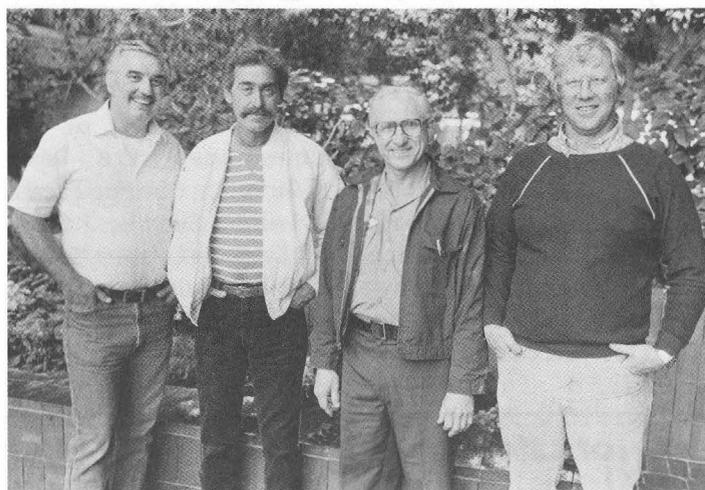
# GOLF SEASON ENDS - LEAGUE WINNERS ANNOUNCED

by Gene Dentino

1984 saw the Fermilab Golf League expand from 26 to 28 teams; 10 teams played at the Fox Valley Country Club on Tuesday and Wednesday nights, and 8 teams played at St. Andrews Country Club on Wednesday nights. The 1985 Golf League Committee members are John Stoffel, Jim Krebs, Al Jonckheere, Ed Pietras, Michelle Gleason, and Jeff Gannon.

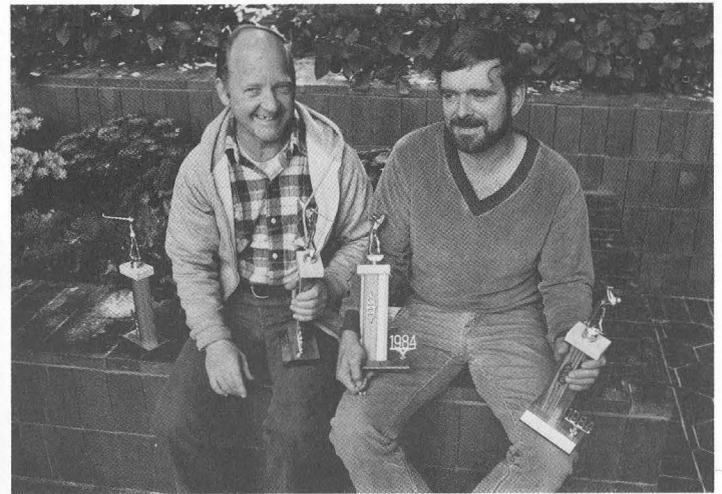


1984 Golf League Committee (left to right): Ed Wilmsen, Frank Juravic, Gene Dentino (not pictured are Bill Noe Jr., John Stoffel, and Al Jones).



League champions and first place Tuesday team (left to right) Ron Currier, Don Tinsley, Len Indykiewicz, and Frank Juravic.

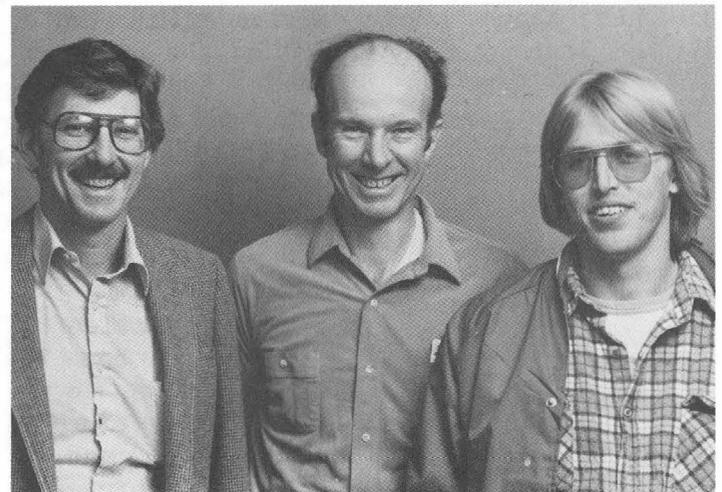
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First place (tie) Wednesday Fox Valley team (left to right) are Claudie King and Don Fichtel (not pictured are Darrell Sigmon and Bill Froemming).



First place (tie) Wednesday Fox Valley team (left to right) Al Guthke, Marty Solis, and Bill Strickland (not pictured is Bob Scherr).



First place St. Andrews Wednesday team. Left to right are Tom Lincicome, John Stoffel, and Jeff Gordon (not pictured is John Stoffel Jr.).