

Calendar

Wednesday, April 20

11:00 a.m. Fermilab ILC R&D Meeting -
(NOTE LOCATION) One North

Speaker: L. Emery, Argonne National
Laboratory

Title: Lattice Design Work for ILC
Damping Ring by FNAL/APS
Collaboration

11:00 a.m. Computing Techniques
Seminar - FCC1W

Speaker: J. Shiers, CERN

Title: The LCG Service Challenges and
Service Ramp-Up

12:00 p.m. Special Lunchtime Video
Presentation - 1 West

Title: Einstein's Unfinished Symphony
Part 2 : $E = mc^2$

2:00 p.m. Proton Driver General Meeting -
1 West

Speaker: B. Lundberg, Fermilab

Title: NuMI Facility With a 2 MW Beam

Speaker: I. Kourbanis, Fermilab

Title: Main Injector Upgrades

3:30 p.m. DIRECTOR'S COFFEE

BREAK - 2nd Flr X-Over

4:00 p.m. Fermilab Colloquium - 1 West

Speaker: N. Boccara, University of Illinois,
Chicago

Title: Highway Car Traffic as a Complex
System: The Physicist's Point of View

Thursday, April 21

2:30 p.m. Theoretical Physics Seminar -
Curia II

Speaker: J. Andersen, University of
Cambridge

Title: Probing the High Energy Limit of
QCD

3:30 p.m. DIRECTOR'S COFFEE

Thirty-Three Fermilab Employees Receive Employee Performance Recognition Awards



33 employees received Performance Recognition Awards last Thursday. (Click on image for larger version.)

On April 14, thirty-three employees received Employee Performance Recognition Awards. Following a luncheon at Chez Leon, Fermilab Director Michael Witherell handed out the awards. "These awards recognize the fact that people do things that make a big difference," Witherell said. "These are the people who make the lab run."

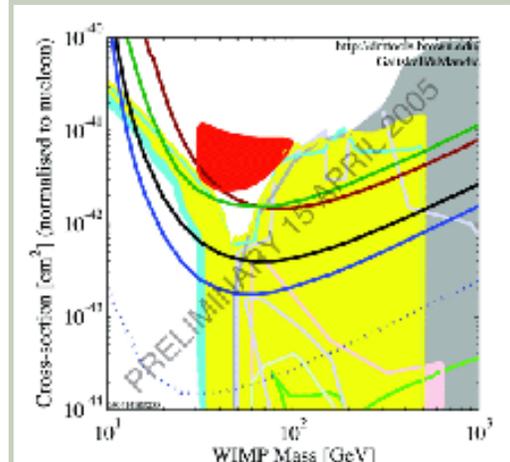
The incoming Fermilab director, Pier Oddone, also attended the luncheon. With slightly less than two and a half months left to Witherell's term as the current Fermilab director, he concluded the ceremony with some parting remarks. "This will be the last time I will have the opportunity to hand out these awards," he said. "Fermilab's greatest legacy is the quality and the commitment of the people who work here. Thank you very much for everything you have done."

[Read more about the recipients](#)

- Elizabeth Clements

Astrophysics Result

CDMS Sets Best Limits In Dark Matter Search



This plot shows the regions of parameter space that have been ruled out by a given experiment. For example, under standard assumptions for the galactic halo and the interaction of WIMPs with nuclei, WIMPs with mass and cross section above the solid blue curve can be excluded at the 90% confidence level by the CDMS-II data taken at Soudan. The red-colored region corresponds to the claim of a signal by the DAMA collaboration, which is clearly incompatible with CDMS for this set of assumptions. The other colored regions illustrate where different Supersymmetry models provide WIMP candidates, or alternatively, can be ruled out by dark matter null results ([more details](#)). (Click on image for larger version.)

Scientists of the Cryogenic Dark Matter Search (CDMS-II) presented new data at the American Physical Society meeting in Tampa on Sunday, April 17, peering with greater sensitivity than ever before into the suspected realm of the Weakly Interacting Massive Particles (WIMPs). The sighting of WIMPs could answer the double-mystery of dark matter on the cosmic scale of astrophysics, and of supersymmetry on the subatomic scale of particle physics. The results were presented in an invited talk by Richard Schnee of Case Western Reserve University, followed by a sequence of

BREAK - 2nd Flr X-Over
THERE WILL BE NO ACCELERATOR
PHYSICS AND TECHNOLOGY
SEMINAR TODAY

Weather



Chance Thunderstorms **69°/32°**

[Extended Forecast](#)

[Weather at Fermilab](#)

Current Security Status

[Secou Level 3](#)

Wilson Hall Cafe

Wednesday, April 20

Portabello Harvest Grain Soup
Santa Fe Chicken Quesadilla \$4.75
Garlic Herb Roasted Pork \$3.75
Jambalaya \$3.75
Roast Beef on Ciabatta w/ Red Pepper Mayo \$4.75
Meatlover's Pizza \$2.75
Pesto Shrimp Linguini with Leeks & Tomatoes \$4.75

The Wilson Hall Cafe now accepts Visa, Master Card, Discover and American Express at Cash Register #1.

[Wilson Hall Cafe Menu](#)

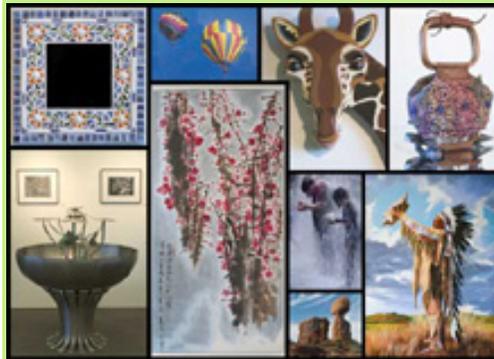
[Chez Leon](#) is now open. Call x4512 to make your reservation.

Search

[Search the Fermilab Today Archive](#)

Info

Fermilab Art Gallery Hosts Artist Reception Tonight



The 2005 Employee Art Show will be on display until May 31. (Click on image for larger version.)

The Fermilab Art Gallery will host an artist reception tonight on the 2nd floor crossover from 5:00 p.m. to 7:00 p.m. for "My Artistic Side - an Employee Art Show 2005." From photographs of buffalo to turtle purses to a functioning fountain, this year's exhibit showcases 37 talented employees.

"The arts not only make for a more stimulating and creative work environment, but they have a direct and positive impact on the employees," writes Fermilab Art Gallery Curator Georgia Schwender on the show's Web site. "By participating in 'My Artistic Side-an Employee Art Show,' we recognize the creativity of the employees."

The Employee Art Show will be on display until May 31. All employees and users are invited to attend the artist reception tonight, which will also feature a performance by the Fermilab Singers. You may be impressed with how creative your co-workers can be.

[more information](#)

- Elizabeth Clements

In the News

contributed talks by CDMS graduate students Michael Attisha of Brown University, Walter Ogburn of Stanford University, Angela Reisetter of the University of Minnesota, and Raymond Bunker of the University of California, Santa Barbara.



The accompanying mass versus cross-section plot shows the results (black curve) from 2004 with the first six-detector tower [PRL 93, 211301 (2004) and astro-ph/0405033]. Those limits were then the best in the world by a factor of four over

EDELWEISS (brown curve) and ZEPLIN (green curve). The combined 2004 and new preliminary 2005 result from CDMSII (blue curve) represents an additional factor of 2.5 improved sensitivity, with two towers containing twelve detectors. This result is a full factor of ten better than EDELWEISS and ZEPLIN, meaning that, while no signal has been seen, CDMSII is exploring virgin territory for dark matter in the form of weakly interacting massive particles.

The lightest supersymmetric particle is an excellent candidate in many models, as shown by the colored regions in the plot background, and the new CDMSII results exclude many SUSY models as well as the signal claimed by DAMA (red closed region). CDMSII is part of the newly-organized Particle Astrophysics Center at Fermilab. A paper describing the scientific results will soon be submitted to Physical

[Richard Schnee of Case Western Reserve University presented the new data Sunday in an invited talk at the American Physical Society meeting in Tampa, Florida.](#)

Fermilab Today is online at:

<http://www.fnal.gov/today/>

Send comments and suggestions to

today@fnal.gov

[Fermilab Today archive](#)

[Fermilab Today PDF Version](#)

[Fermilab Result of the Week archive](#)

[Fermilab Safety Tip of the Week archive](#)

[Linear Collider News archive](#)

[Fermilab Today classifieds](#)

[Subscribe/Unsubscribe to Fermilab Today](#)

Department of Energy Press Release, April 19, 2005

Energy Department Awards Contract to the University of California to Manage and Operate Lawrence Berkeley National Laboratory

WASHINGTON, DC -- The Department of Energy (DOE) has awarded a new five-year contract to the University of California to manage and operate its Lawrence Berkeley National Laboratory (LBNL). The award is the result of the first competition of the management and operating (M&O) contract for the laboratory since its inception.

The value of the new five-year contract is an estimated \$2.3 billion. Berkeley Lab's \$469 million annual budget is funded by the department's Office of Science, other DOE programs, as well as other government agencies and private industry.

"Because of its outstanding work, including 10 Nobel Prizes won by its scientists, Lawrence Berkeley Laboratory has helped ensure U.S. scientific leadership for more than 60 years," Secretary of Energy Samuel W. Bodman said. "This contract award will allow LBNL and its outstanding researchers and staff to seamlessly continue their work as they set new standards of scientific excellence."

[read more](#)

Review Letters.



The CDMS Collaboration (Click on image for larger version.)

[Result of the Week Archive](#)

Announcements

Lunchtime Video Today

Today's lunchtime video will be, "Einstein's Unfinished Symphony - Part 2: $E=mc^2$ ". The video will be shown in One West at noon. All welcome. Eating lunch permitted.

Spring Hatha Yoga Classes

The next class will be from April 28 until June 16. Chris Baxter will be conducting the Yoga classes at Fermilab in the 15th Floor SW Crossover or outside by the small lake next to the path to the Education Center, west side of Wilson Hall (weather permitting) on Thursdays from noon to 1 PM. This 8-week class is \$80.00. Registration can be made in the Recreation Office, by mail M.S. 126 or by phone using a credit card, Visa and MasterCard accepted. Checks should be made payable to Fermilab. (Recreation Facility membership is NOT required for this class) Maximum of 25 people. Deadline to register is April 22. A yoga mat is required for this class.

[more information](#)

Earth Day is this Friday

Activities Begin at 11:30 a.m.

Fermilab's Earth Day tree-planting activities for employees and their families, sponsored by Roads and Grounds, will be

From MSNBC, April 18, 2005

Women explore the frontiers of physics

Einstein's intellectual heiresses add to his legacy

By Alan Boyle

Around the world, the 21st-century successors to Albert Einstein are delving into the mysteries surrounding ghostly neutrinos, rolled-up dimensions and clouds of super-cooled gas that can freeze a light beam in its tracks.

And plenty of those successors are women.

Their work on the frontiers of physics runs counter to the claim that women might be innately less suited for math and science — a hypothesis that was most recently, and provocatively, raised by Harvard President Lawrence Summers in January. Time magazine framed the issue in the form of a question: "Who Says a Woman Can't Be Einstein?"

[read more](#)

held on Friday, April 22 with a rain date of Monday, April 25. The planting will start at 11:30 a.m. and will go until all of the trees are planted. Bring a shovel, and wear boots and gloves (and this year, bring your own lunch, too). The area to be planted this year is directly west of Warehouse II.

[more information](#)

Fermilab Association of Rocketry

The Fermilab Association of Rocketry is having its monthly club meeting on April 20 at 5:00 p.m. The group will meet at the Users Center piano room.

[more information](#)

International Folk Dancing

International Folk Dancing will host expert Balkan dance teacher and researcher [Dennis Boxell](#) for a special workshop, Thursday, April 21, in Kuhn Barn. The workshop begins at 7:30 p.m. and will have plenty of material for beginners and school age children. Everyone is welcome. A second workshop is planned for May 12 : Daniela Ivanova will teach dances from Bulgaria to accordion music by Angel Nazlamov. Info at 630-584-0825 or 630-840-8194 or folkdance@fnal.gov.

[Upcoming Activities](#)