

Calendar

Monday, November 29

2:30 p.m. Particle Astrophysics Seminar - Curia II

Speaker: N. Gnedin, University of Colorado

Title: Simulating Reionization: Yesterday, Today, and Tomorrow

3:30 p.m. DIRECTOR'S COFFEE

BREAK - 2nd Flr X-Over

4:00 p.m. All Experimenters' Meeting - Curia II

Tuesday, November 30

3:30 p.m. DIRECTOR'S COFFEE

BREAK - 2nd Flr X-Over

4:00 p.m. Accelerator Physics and Technology Seminar - 1 West

Speaker: P. Bauer, Fermilab

Title: Materials Research for Superconducting RF Cavities at Fermilab

Wilson Hall Cafe

Monday, November 29

Potato Au Gratin

Monte Cristo \$4.75

Savory Roasted Chicken Quarters \$3.75

Lasagna Bolognese \$3.75

Chicken Ranch Wrapper \$4.75

Sausage Alfredo Pizza \$2.75

Szechuan Style Pork Lo Mein \$4.75

[Wilson Hall Cafe Menu](#)

[Chez Leon](#)

Weather

Atrium Exhibit Shows Role of IT in Physics



John Urish setting up the sculpture *Collision Event* (Click on image for larger version.)

Straight back from its successful participation in the SC2004 supercomputing trade fair in Pittsburgh, the joint Fermilab/SLAC [Computing the Quantum Universe](#) exhibit is now on view in the Wilson Hall atrium. The exhibit shows how progress in information technology is now indispensable to particle physics research.

Computing the Quantum Universe is a six-sided enclosure, with posters on the outer walls, and flat-panel screens with animated graphics in the center. The outer layer explains the nine great open questions of particle physics -- as outlined in the Quantum Universe report, whose graphics themes are also recalled -- and showcases the Fermilab and SLAC experiments that address those questions.

The center section has 24 screens, each presenting a different facet of the computing and networking efforts done by the two labs and the collaborations they take part in. Among the featured projects and themes, Lambda Station (a new

Safety Tip of the Week

SAFER

Even the best of us make mistakes. Studies show that human beings make 5-7 mistakes an hour. Sometimes these mistakes are trivial and have little effect on what we are doing. At other times the consequences are more significant.

For example, over 77% of the occurrences in DOE's Occurrence Reporting Processing System (ORPS) cite personnel



error as a causal factor. Additionally, mistakes can occur because the organization behind the employee has created a situation that allows it to happen.

At Fermilab, we rely heavily on job planning and hazard analysis to identify and address ES&H hazards. By approaching human performance as a potential hazard in the workplace, mistakes can be avoided. Application of the SAFER method during job planning and pre-job briefings can be helpful in this area:

- **Summarize critical steps** - What are the critical phases of the task? What parts of the task must absolutely go right?
- **Anticipate errors** - How can we make a mistake at each point? Are there time pressures, unclear roles & responsibilities, imprecise communications, interruptions, personality conflicts, stresses, assumptions, or complacency?



Chance Snow **40°/29°**

[Extended Forecast](#)

[Weather at Fermilab](#)

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Fermilab networking initiative), large-scale lattice QCD simulations, and a simulation of the Fermilab Booster beam. Also prominent is Grid computing, which has now become a major theme at events such as SC2004, and multidisciplinary DOE SciDAC projects.

San Francisco artist Rob Newell's Collision Event, a glass-and-fiber-optic sculpture intermittently lit by blue light, crowns the booth with a psychedelic touch.

A Computing Division team led by John Urish and Jeff Kallenbach worked with SLAC to create the exhibit, and together with Penelope Constanta and Ian Fisk, they put in long hours last week setting it up in Wilson Hall. "It was a nice diversion," said Kallenbach, "and it's nice to do stuff with SLAC."

In the News



Robert Bacher, president of Universities Research Association in the 1970s, passed away on November 18. He was 99. After the war, Dr. Bacher served on the United States Atomic Energy Commission, and he became a professor of physics at Caltech in 1949. "He was certainly distinguished and right up with Rabi and Ramsey as a distinguished servant of the Government," said Fermilab physicist Dick Carrigan.

- **Foresee consequences** - What is the worst thing that can go wrong if a mistake is made at each point?
- **Evaluate defenses** - What can we do to prevent the mistake? Assure sufficient schedule, have workers repeat back instructions, keep track of stop/start points, promote questioning attitudes, and have others monitor activities.
- **Review operating experience** - How has this been done in the past? What mistakes were made? How can we avoid them?

Have a great day and let's work safely all week!

[Safety Tip of the Week Archive](#)

Announcements

symmetry Email Notification

Hard copies of the new issue of *symmetry* will be distributed later this week. To receive an email notification with the table of contents and links to online versions of all stories, please [sign up](#).

Christmas Schooner, December 4

The Fermilab Arts Series presents "[The Christmas Schooner](#)," performed by the Bailiwick Theater. Saturday, December 4, 2004, at 8 p.m. in the Ramsey Auditorium. Tickets - \$20 (\$10 for ages 18 and under). For reservations call x2787.

The Dawn of X-ray Astronomy, December 10

The Fermilab Lecture Series presents "[The Dawn of X-ray Astronomy](#)," presented by 2002 Nobel Prize winner Riccardo Giacconi. Friday, December 10, 2004, at 8 p.m. in the Ramsey Auditorium. Tickets are \$5. For

From the *New York Times*, November 22, 2004

Robert Bacher, Manhattan Project Physicist, Dies at 99

By Jeremy Pearce

Dr. Robert F. Bacher, a nuclear physicist and one of the leaders of the Manhattan Project, died on Thursday at a retirement home in Montecito, Calif. He was 99.

His death was announced by the California Institute of Technology, where he had been a professor and provost.

[Read more](#)

From the Fermilab History and Archives Project

Robert Bacher, former president of Universities Research Association, was chairman of the lab's May 11, 1974 dedication program that changed the laboratory's name from National Accelerator Laboratory to Fermi National Accelerator Laboratory. Bacher met Enrico Fermi in 1933 and 1936 at summer lectures for which Fermi traveled to the U.S. from Italy. Bacher recalled: "I remember catching up with [Fermi] as he started to swim across a lake at Ann Arbor, to tell him that it was 1.5 miles across that lake, but Fermi kept on swimming and went the whole distance. He was a great competitor and loved to win."

[read more](#)

reservations call x2787.

Wilson Hall Super Science Stocking Stuffer Sale

The Wilson Hall Super Science Stocking Stuffer Sale will be outside One West on December 1 and 2 from 10:00 am to 1:00 pm. Fermilab apparel, coffee mugs, keychains, science kits and more.

Holiday Book Fair

Holiday Book Fair Fermilab's Recreation Office will sponsor its "Holiday" Book Fair, hosted by Books are Fun, in the Atrium on Monday, November 29 from 10:00 AM until 6:00 PM and on Tuesday, November 30 from 7:00 AM until 3:00 PM. The Book Fair will accept cash, personal check, MasterCard, Visa, American Express and Discover card. A portion of the proceeds from the Book Fair subsidizes some of Recreation Office's Programs.

2005 Charitable Giving Campaign

Fermilab employees have the opportunity to contribute annually by payroll deduction to one, two or three IRS approved charities of their choice. To participate, a contribution of at least \$52.00 on an annual basis for one charity or \$78.00 for two or more can be pledged. If you would like to participate in the Charitable Giving Campaign in 2005, employees must complete and return [an enrollment form](#) to payroll by December 1, 2004. For more information, contact Fermilab's Equal Opportunity Office at x3591, x4633 or x3415.

Upcoming Classes

December 13 - 17: Advanced Linux Administration

December 14 & 15: Behavioral Interviewing (Talent Selection) two consecutive half-days

January 10 - 14: Advanced Linux
Administration

[more information](#)

[Upcoming Activities](#)