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Furlough Information

New furlough information, including an up-to-date Q&A section, appears on the furlough Web pages daily.

Calendar

Tuesday, Feb. 19 3:30 p.m. **DIRECTOR'S COFFEE** BREAK - 2nd Flr X-Over THERE WILL BE NO **ACCELERATOR PHYSICS** AND TECHNOLOGY SEMINAR TODAY

Wednesday, Feb. 20 3:30 p.m.

DIRECTOR'S COFFEE BREAK - 2nd Flr X-Over 4 p.m.

Fermilab Colloquium -

1 West

Speaker: P. Blasi, Fermilab / INAF/Arcetri Astrophysical Observatory

Title: The Origin of Cosmic Rays

Click here for NALCAL, a weekly calendar with links to additional information.

Weather



Cloudy 15 °/1°

Extended Forecast Weather at Fermilab

Current Security Status

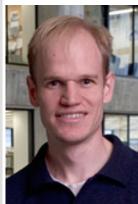
Secon Level 3

Wilson Hall Cafe

Feature

Physicist offers remedy to pain of airplane boarding

Jason Steffen waited to board a plane in the Seattle airport. He waited to get his boarding pass scanned. Then he walked a few steps down the jetway, and waited some more.



Fermilab particle astrophysicist Jason Steffen found a method that would allow quicker boarding for airplane passengers.

His frustration grew as he watched the passengers in front of him slowly board the plane.

"It was hurry up, wait in line, check your ticket, walk down the jet way and wait in another line," he said. "I thought, I've got to be able to do something about this."

After brooding on the idea for 18 months, Steffen, a physicist in the Particle

Astrophysics Center at Fermilab and a collaborator on the GammeV experiment, came up with a mathematical solution. It lets passengers board planes four to 10 times faster than it typically takes. The improvement in boarding time depends on the size of the airplane.

Steffen posted his method this month to the arXiv's Physics and Society preprint server.

"I wrote the article out of frustration," he said.

To figure out the most efficient way to board an airplane, Steffen created a computer program to model an airplane and virtually load passengers. "I thought that loading passengers front to back would be the worst case, and loading back to front would be the best, but they took the same amount of time," he said.

The problem didn't lie with the order of passengers boarding, but with their luggage. He found that no matter the direction, only one passenger per row could load luggage at a time. The most effective way to load passengers was to load in groups spaced two

HEPAP Meeting

Director's Corner

On February 14 and 15 the High Energy Physics Advisory Panel that reports to DOE and NSF met in Washington DC. The dominant topic of discussion was the impact of the FY08 omnibus bill on our field and the proposed recovery for particle physics through the Administration's budget



Pier Oddone

request for FY09. If this request were accepted by Congress, the funding would largely restore the cuts made in the FY08 omnibus bill. It also would represent an overall large increase for the Office of Science over the enacted FY08 budget. In light of what happened last December with the omnibus bill, DOE Undersecretary Dr. Ray Orbach explained the challenge that faces the scientific community: to make the case for significant increases in long-range basic research for the physical sciences, when it is often politically easier for Congress to focus on short-term applied research.

I made a presentation on the situation at Fermilab, Dr. Persis Drell on the situation at SLAC, Dr. Tony Chan on the NSF and Dr. Dennis Kovar on the overall state of DOE's High Energy Physics Program. Beyond how we cope with FY08 and how we may recover in FY09, Dr. Kovar made several important announcements that require our close attention. The first is the restructuring of the Office of High Energy Physics (OHEP). The office will be organized according to scientific and technical campaigns, with a designated program manager accountable to manage each topic across both laboratories and universities. Along with the reorganization, Dr. Kovar will implement a new review process with each different topic reviewed by a single panel of peers across the full set of laboratories. We must pay close attention to the structure of these reviews because our programs will be reviewed and compared directly with those of other laboratories. Depending on the quality of our programs in relation to others, we stand to achieve gains

Tuesday, Feb. 19

- Chicken and rice soup
- Low-carb burger
- Baked meatloaf w/gravy
- *Parmesan baked fish
- Peppered beef
- Assorted Pizza slices
- Chipolte chili and queso nachos supreme *Smart cuisine

Wilson Hall Cafe Menu

Chez Leon

Wednesday, Feb. 20 Lunch

- Spicy meat turnovers
- Confetti salad
- Pineapple rum cake

Thursday (Next week), Feb. 28

Dinner

- Sancocho w/pastetobos
- Roast suckling pig
- Chayote guisado
- Rice & pigeon peas
- Flan & tropical fruit

Chez Leon Menu

Call x4598 to make your reservation.

Archives

Fermilab Today

Result of the Week

Safety Tip of the Week

ILC NewsLine

Info

Fermilab Today is online at: www.fnal.gov/today/

Send comments and suggestions to: today@fnal.gov

or three rows apart so they could simultaneously load luggage.

Steffen's recently published results have yielded quite a few international press phone calls, but no bite so far from airlines. "I doubt that when an airline needs to study this, they'll say 'We need to go talk to a physicist," Steffen said.

To read Steffen's paper visit: boarding study.

-- Rhianna Wisniewski

In the News

'08 may prove to be a watershed year in large-scale physics

From *Arizona Daily Star*, Feb. 17, 2008

BOSTON – "This will be an exciting year for particle physics." Considering the average person's excitement at the mention of particle physics, this statement by Robert Aymar of CERN, the European Organization for Nuclear research, might raise an eyebrow. But Aymar and the other speakers at a lecture titled "Physics on a Grand Scale" proved that the future of all types of international endeavors in physics will excite more than just subatomic particles. The lecture was part of the annual meeting of the American Association for the Advancement of Science, the largest general scientific society in the world.

Read more

In the News

Big science's big day

From *MSNBC.com*, Feb. 16, 2008

The most anticipated date in physics is the day the world's biggest particle-smasher, Europe's Large Hadron Collider, reaches full power. That day had been set for last November, but a magnet mishap and other factors forced a delay until this spring. The final piece of one of the collider's mammoth detectors, the Compact Muon Solenoid, was lowered into its underground cavern just last month. And now the big day is likely to come in June or July rather than May.

The fact is that officials at Europe's CERN particle physics lab don't know to the day when the world's biggest physics project will be ready for prime time. However, they *do*

but also, potentially, losses. Later this year, two such reviews will take place: the first on Accelerator Science and the second on Theoretical Particle Physics.

For the health of our field we must actively support OHEP. OHEP has obtained approval and will fill twelve new permanent positions for project/program managers, scientific/technical advisors and support positions. OHEP has been understaffed for years. It needs to rebuild. In addition to these permanent positions, the office will require several IPAs/detailees as in the past, with two from Fermilab already committed to helping. I want to encourage anyone who is interested in these positions to let me know and to contact Dr. Kovar. We have a keen interest in making OHEP successful.

Accelerator Update

Update author Bruce Worthel is on furlough. The update will return next week.

Read the Early Bird Report
View the Tevatron Luminosity Charts

Announcements

Have a safe day!

Employee art show - applications due Feb. 25

"Hidden Talents: Fermilab Employee Art Show" will be on display, March 19 - May 14, 2008. Intent applications are due Feb. 25, and forms are available in the Art Gallery on the stand near Curia II or on the Web.

Adobe Acrobat 7.0 Professional: Advanced - Feb. 28, 2008

Learn to convert technical documents to PDF files, enhance and control PDF content accessibility, customize PDF documents for interactive use only and prepare PDFs for commercial printing. Learn more and enroll

Kyuki-Do class begins Feb. 25

Kyuki-Do, a martial art similar to Taekwondo, leads to a practical method of self-defense. It teaches balance, power and grace. Classes are held for six weeks on Monday and Wednesday from 5-6 p.m. at the Recreation Facility. You must register through the Recreation Office and have a Recreation Facility membership.

Improve your interpersonal communication skills

Learn effective communication strategies by

know the day for the big celebration.

Read more

assessing your communication style and developing skills for more productive work relationships through the "Interpersonal Communications Skills" course on March 4. Click here for more info and enrollment.

Applications due for 2008 CERN-Fermilab Hadron Collider school

Applications for the 2008 CERN-Fermilab Hadron Collider Physics Summer School are due Feb. 29. The school takes place August 12-22, 2008, at Fermilab, and focuses on training advanced graduate students and young postdocs. Both theorists and experimentalists should apply. The list of lectures and lecturers has been posted at the school Web site. Click here for more information.

Fermi National Accelerator Laboratory Office of Science/U.S. Department of Energy | Managed by Fermi Research Alliance, LLC