Fermilab Today Wednesday, Jan. 21, 2009

Calendar

Wednesday, Jan. 21
3:30 p.m.
DIRECTOR'S COFFEE BREAK - 2nd Flr X-Over
4 p.m.
Fermilab Colloquium - One West
Speaker: Apostolos Georgopoulos, University of Minnesota
Title: Brain Mechanisms of Cognitive Processing

Thursday, Jan. 22
THERE WILL BE NO PHYSICS AND DETECTOR SEMINAR THIS WEEK
2:30 p.m.
Theoretical Physics Seminar - Curia II
Speaker: Alexander Mitov, State University of New York, Stony Brook
Title: Top-Pair Production at Hadron Colliders
3:30 p.m.
DIRECTOR'S COFFEE BREAK - 2nd Flr X-Over
THERE WILL BE NO ACCELERATOR PHYSICS AND TECHNOLOGY SERMINAR TODAY

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

Weather

Partly sunny
23°/15°

Extended Forecast
Weather at Fermilab

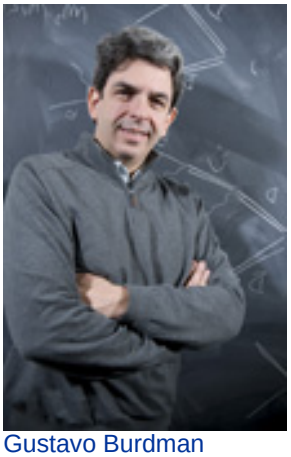
Current Security Status

Secon Level 3

Wilson Hall Cafe

Feature

Gustavo Burdman is first Ben Lee Fellow



Gustavo Burdman

Gustavo Burdman shares many of the interests of the late esteemed theorist Ben Lee. Burdman will get a chance to further explore those interests as the first Ben Lee Fellow.

The fellowship was created last year to commemorate a Fermilab pioneer. Lee is well-known for his work on the theory of elementary particles. He directed the laboratory's theoretical physics department from 1973 until his death in 1977. He also studied weak interactions and symmetry principles, and he had just begun a research program on cosmology before he died.

Burdman, a professor at the Physics Institute of the University of San Paulo who also holds a Guggenheim Fellowship, expects to work mainly on two issues at Fermilab: the origin of the masses of elementary particles and the nature of dark matter.

"I'm very excited about having Gustavo here," said Fermilab Deputy Director Young-Kee Kim, who helped to establish the fellowship for senior theorists, building on the Fermilab Frontier Fellowship.

Burdman started his career here as a post-doc in 1994; it's also where he met his wife, astrophysicist Ivone Albuquerque. She will work on dark matter issues at Fermilab and the Pierre Auger cosmic ray project.

Burdman looks forward to working with Fermilab's large group of theorists and expects to work closely with experimentalists. That environment owes much to the example set by Lee, who helped to bridge theory and experiment at the laboratory.

Fermilab theoretical physicist Chris Quigg, who followed Lee to Fermilab, said that "Lee has powerful gifts in all dimensions."

Lee compared his work to solving a jigsaw

Director's Corner

A physicist at the inauguration

Fermilab Director Pier Oddone and his wife, Barbara, at the inauguration of President Barack Obama on Tuesday.

Together with perhaps two million people, Barbara and I had the good fortune to be at the inauguration of President Barack Obama. The feeling of sharing a celebration with more than a million others, a rainbow of people from every walk of life and every background, united in the hope for a better tomorrow, was a moment to capture hearts and fire imaginations. Many families with members of three generations, with tears in the eyes of the elders and smiles in the faces of the young, gave their youngest the unforgettable experiences to shape their life's feelings about civic life, democracy and our government.

In a multitude such as yesterday's and with long waits, a physicist's mind wanders. First, as the crush of people funnels for hours through the security choke points, individuals no longer the masters of their own directions but rather part of fluid flow, the mind calculates whether there is enough time for this fluid to make it through the gates before the President's address. After an hour in the frigid weather, the mind wonders what the equilibrium temperature of ones toes might be after five more hours. Eventually the mind gets to a higher plane. How many different hopes do a million people in the mall and the many million more throughout the country carry with them and how in the world will they be

Wednesday, Jan. 21
- Smart cuisine: chicken noodle
- Pizza burger
- Smart cuisine:*maple dijon salmon
- Smart cuisine: Mongolian beef
- California club
- Assorted sliced pizza
- Chicken pesto pasta

*Carb restricted alternative

Wilson Hall Cafe Menu

Chez Leon

Wednesday, Jan. 21
Lunch
- Spiced cornish hens
- Broccoli & rice
- Berry tart

Thursday, Jan. 22
Dinner
Closed

Chez Leon menu
Call x3524 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/

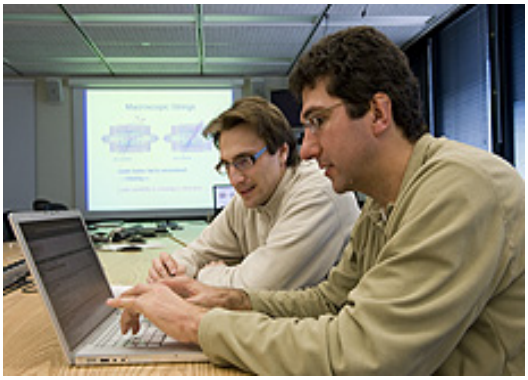
Send comments and suggestions to:
today@fnal.gov

puzzle. He once told a group of science writers: “At moments of despair and frustration, I feel as though somebody has scrambled two boxes of jigsaw puzzles for me to put together. But I believe in what Einstein said: ‘God is subtle but he is not malicious.’”

-- Kristine Crane

Photo of the Day

Luty named second theorist-of-the-week



Markus Luty, (right) a theorist from UC Davis, works with DZero experimentor Oleksiy Atramentov. Luty is the second LPC theorist-of-the-week. He will hold office hours Wednesday from 4-5 p.m. and Thursday from 10 a.m. - noon in Fermilab's LHC Physics Center on the 11th floor crossover. Luty will also give a series of talks this week. The theorist-of-the-week program aims to foster interactions between theorists and experimentalists at Fermilab.

In the News

How do you weigh the Milky Way?

From ***New Scientist***, Jan. 20, 2009

Earlier this month, astronomers announced a new measurement of the Milky Way's mass – saying it is 50 percent heftier than thought and about as heavy as our nearest large neighbour, Andromeda.

The new result is a major revision and a full three times larger than another team's recent estimate. It also raises a question: why don't astronomers know how much our home galaxy weighs?

Astronomers have attempted to measure the mass of the Milky Way since the 1920s. But the measurement turns out to be exceedingly tricky, not least because some 90 percent of the galaxy's mass is thought to be made of

accommodated when the “hard choices” have to be made?

The answer was in the President’s address, calling us to come together and put our shoulders to the task of solving the myriad problems we confront. A physicist would call this coherence, and would understand instantly that coherent phenomena grow as the square of the number of individual elements involved. Is the power of a million people acting coherently a million times what an individual can achieve or a trillion times more effective as in fully coherent behavior? Did we win WWII in four years when now it takes us four years on the preliminaries before breaking ground while following project management order 413.3? In the last few years we have seen first hand the power of incoherence as political fights jammed initiatives not only in the physical sciences but much more broadly. While looking at a million people, listening to President Obama’s words and imagining that we could act coherently as a nation, nothing seemed impossible.

Safety Update

ES&H weekly report, Jan. 21

This week's safety report, compiled by the Fermilab ES&H section, includes no reportable injuries. We have now worked 12 days since the last recordable injury. Find the full report here.

Safety report archive

Accelerator Update

Jan. 16-19
- Five stores provided ~50.75 hours of luminosity
- Linac discovered cause of velocity meter problems
- MI suffers from kicker prefire faults
- TeV ground fault found
- Booster had RF problems

Read the Current Accelerator Update
Read the Early Bird Report
View the Tevatron Luminosity Charts

Announcements

dark matter – a mysterious, invisible substance that only reveals its presence by its gravitational tugs on stars and gas clouds.

Read more

In the News

Fast-spinning stars get new image

From ***MSNBC***, Jan. 20, 2009

With launch of Fermi telescope, scientists getting glimpse of pulsars

Since their discovery 40 years ago, pulsars -— the rapidly spinning, highly magnetized crushed cores of exploded stars — have largely been detected via the pulsing radio signals emitted by their lighthouse beam-like jets. But astronomers have suspected that these pulses give only the slightest hint of the true power of these cosmic dynamos.

With the launch of NASA's Fermi Gamma-ray Space Telescope (formerly GLAST) in June of last year, scientists are finally getting a glimpse of the powerful hearts of these stellar beasts. In its first four months of operation, Fermi detected more than three dozen pulsars, 12 of which are new gamma-ray-only pulsars.

Read more

Benefits Update

Changes to the Family and Medical Leave Act Jan. 16

Travel Update

Changes in U.S. admission procedure

Have a safe day!

Intermediate / Advanced Python Programming - Jan. 27 - 29

NALWO Brown Bag Lunch - "Women as Classic: From BC to AD"

ACU bill pay demonstration Jan. 29

Outlook 2007 New Features classes offered Feb. 3

Conflict Management & Negotiation Skills class offered Feb.3

PowerPoint 2007: New Features class offered Feb. 3

Facilitating Meetings That Work class offered Feb. 4

Word 2007: New Features class offered Feb. 4

Excel 2007: New Features class offered Feb. 4

Interpersonal Communication Skills class offered Feb. 5

Submit an announcement

Additional Activities