

Wednesday, August 24, 2005

Calendar

Wednesday, August 24

3:30 p.m. Director's Coffee Break -

2nd Flr X-Over

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

Speaker: Z.-T. Lu, Argonne National

Laboratory/Enrico Fermi Institute

Title: Atom Trap, Krypton-81, and

Saharan Water

Note: There will be no Fermilab ILC R&D Meeting this week

Thursday, August 25

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

Speaker: P. Ko, Korea Advanced Institute of Science and Technology

Title: Partially Composite Two-Higgs

Doublet Model

3:30 p.m. Director's Coffee Break - 2nd Flr X-Over

Note: There will be no Accelerator Physics and Technology Seminar today

Weather



Mostly Sunny **76°/59°**

[Extended Forecast](#)

[Weather at Fermilab](#)

Current Security Status

[Second Level 3](#)

Wilson Hall Cafe

Colloquium to Discuss Dating of Water Samples



Today's Fermilab Colloquium will describe the process of dating fresh water found beneath the Sahara Desert. (Click on image for larger version.)

A vast amount of fresh water has existed beneath the Sahara Desert for approximately a million years. In today's Fermilab Colloquium, Zheng-Tian Lu of Argonne National Laboratory and the Enrico Fermi Institute will explain how that water can be dated by using single atoms, trapped by laser light, of rare Krypton isotopes. The Krypton was made in cosmic ray interactions in the atmosphere long ago. The method is called ATTA for Atomic Trap Trace Analysis, and should have many applications, including dating ancient polar ice and learning about climate history.

Fermilab Colloquium presentations begin at 4:00 p.m. in Wilson Hall, 1 West. All are welcome.

Thoughts on a Butterfly Walk through the Prairie

Future Teachers Complete Fermilab Prairie Research



Master teacher Anna Zuccarini (left) worked with pre-service teachers Dorothy Wyrzykowski (center) and Kristen Maier this summer. (Click on image for larger version.)

Two recent graduates of the University of Illinois at Chicago spent this summer conducting research projects at Fermilab. Dedicated to a career in teaching, Kristen Maier and Dorothy Wyrzykowski recently wrapped up their summer internships in the Pre-Service Teacher internship program with research presentations on ecology. A DOE-funded program, PST helps future teachers increase their scientific knowledge by working at a national laboratory.

"There aren't that many opportunities for teachers to get their hands dirty and actually do science, especially at the elementary and middle school levels," said Spencer Pasero, who manages the program for the Education Office.

With master teacher Anna Zuccarini at their side, Maier and Wyrzykowski rose with the sun, trudged through wetlands and grasses two meters tall, and even endured poison ivy to complete their research projects.

Working with physicist Tom Peterson and

Wednesday, August 24

French Onion Soup

Texas Style Meatloaf Sandwich \$4.85

Grilled Chicken with Black Bean & Corn

Salsa \$3.75

Kielbasa & Sauerkraut \$3.75

Smoked Turkey Panini \$4.75

Sausage & Pepperoni Combo Pizza

\$3.50

Fettuccine Carbonara w/Ham &

Mushrooms \$4.85

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

[Wilson Hall Cafe Menu](#)

Chez Leon

Wednesday, August 24

Lunch

Curried Chicken & Pineapple Salad

Raspberry Sherbet w/Raspberry Sauce

Thursday, August 25

Dinner

Melon and Prosciutto

Scallops in Maple Cream

Sautéed Pea Pods

Black Forest Parfait

[Chez Leon Menu](#)

Call x4512 to make your reservation.

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Info



Author Elizabeth Wade (left) and others examine a butterfly on Tom Peterson's (front right) latest Butterfly Walk through Fermilab's prairie. (Click on image for larger version.)

Fermilab public affairs intern Elizabeth Wade reflects on her recent Butterfly Walk through Fermilab's Prairie

While most people are scared of spiders or snakes, the creepy-crawlies that terrify me the most are butterflies. Ridiculous, I know, but I still scream and jump away when they fly at my face. In light of this fact, I'm not quite sure why I decided to go on Tom Peterson's most recent Butterfly Walk. Like normal people, Peterson likes butterflies; unlike most people, he is also an encyclopedic source of knowledge about them, and shares his passion with others from the Fermilab community on his Butterfly Walks through the prairie.

The last Butterfly Walk was held on such a nice day that I wanted any excuse to spend my lunch hour outside. Peterson, who works in the Technical Division's Development and Test Department when he is not studying butterflies, pointed out at least a dozen species in our one-hour walk—making many of his identifications by expertly spotting subtle markings on the butterflies as they flew past us—and made sure to include interesting facts

Fermilab ecologist Rod Walton, Wyrzykowski conducted research on the vegetation in the habitat of the Meadow Fritillary butterfly, evaluating the quality of native plants found onsite for butterfly survival. "This internship not only helped me better understand the research process, but by understanding the natural regions in which butterflies live, conservationists will be able to better manage the habitats in which these butterflies are found," Wyrzykowski said.

In collaboration with Walton and physicist and bird expert Peter Kasper, Maier studied the preferred habitats for Henslow's Sparrows and Grasshopper Sparrows. "My study left us with more questions than answers," said Maier. "But that's the scientific process."

The interns also completed education modules, which outline a method by which teachers can teach students about butterflies and birds.

"So many teachers try to teach science without having actually taken and analyzed data themselves," said Pasero. "This program offers the perspective that there's more to teaching than you can find in a textbook."

—Kelen Tuttle

Announcements

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about each one. When we saw monarchs, Peterson told us about the species' regular migration to Mexico. A camera-shy butterfly flew away when we tried to take its picture, but Peterson advised us to wait, because many butterflies return to specific perches. Sure enough, it came back and was ready to pose.

Not only was Peterson's walk a fascinating trip into the world of butterflies, it also raised some important issues about nature at Fermilab. Walking slowly through the prairie and taking time to examine the life around us gave participants a sense of how vibrant the ecosystem is. The lab works hard to restore and maintain its beautiful environment, and the Butterfly Walk is a great way to fully appreciate importance of the effort—even if butterflies aren't exactly your cup of tea.

—Elizabeth Wade

In the News

From *The New York Times*, August 23, 2005 Scientists Speak Up on Mix of God and Science

By Cornelia Dean

At a recent scientific conference at City College of New York, a student in the audience rose to ask the panelists an unexpected question: "Can you be a good scientist and believe in God?"

Reaction from one of the panelists, all Nobel laureates, was quick and sharp. "No!" declared Herbert A. Hauptman, who shared the chemistry prize in 1985 for his work on the structure of crystals.

Belief in the supernatural, especially

Mixed Bowling League

The Fermilab Tuesday Night Mixed Bowling League will begin on September 6th, 2005. It is a 30 week ABC/WIBC sanctioned league and meets at AMC Bowling Center (formerly Valley Bowl) in North Aurora. We are looking for complete 4-person teams or any number of individual bowlers. Start time is 6 p.m. For information contact Dan Johnson (x2074), Rene Padilla (x3160) or Jackie Coleman (x3027).

PC Manager Meeting

The August PC Manager meeting will be held Wednesday, August 24th, from 9:00 - 10:00 a.m. in WH8X. There will be updates on software licenses and security as well as an open discussion regarding recent security vulnerabilities and rethinking the way the lab handles machine management.

Power Outage

The power will be cut to EAD Operations Center (although there should be a generator to keep the power up) on Saturday, August 27, from 7 a.m. to 4:30 p.m.

Upcoming Classes

September 12 & 13: Word Intro & PowerPoint Intro

September 27: Excel Intermediate

September 28: Word Intermediate

October 11: Excel Advanced

October 12: Word Advanced

October 12 & 19: Interpersonal Communication Skills

[More Information](#)

Vending Machines Out of Service

Vending machine services will not be available for 2 to 3 days this week. The

belief in God, is not only incompatible with good science, Dr. Hauptman declared, "this kind of belief is damaging to the well-being of the human race."

[Read More](#)

vending machine operation for the entire Lab is being transferred to another organization during this time. Full service should be restored by the end of the week. [More Information](#)

[Upcoming Activities](#)