

## Calendar

### Friday, June 2

**9:00 a.m.** GSA – Annual Fermilab

Student Conference – 1 West

[New Perspectives 2006](#)

**12:00 p.m.** Fermi Singers - Ramsey

Auditorium

**3:30 p.m.** DIRECTOR'S COFFEE

BREAK - 2nd Flr X-Over

THERE WILL BE NO JOINT

EXPERIMENTAL THEORETICAL

PHYSICS SEMINAR THIS WEEK

### Saturday, June 3

**9:00 a.m.**

GSA – Annual Fermilab Student

Conference – 1 West

[New Perspectives 2006](#)

### Monday, June 5

**2:30 p.m.** Particle Astrophysics Seminar

- Curia II

Speaker: K. Kohri, Harvard University

Title: Cosmological Lithium Problem and

Long-Lived Massive Particles

**3:00 p.m.** DIRECTOR'S COFFEE

BREAK - 2nd Flr X-over

Curia II

**4:00 p.m.** All Experimenters' Meeting -

Curia II Special Topics: Water Quality

Task Force; 1 West Upgrade

For links to events, click [here](#).

## Weather



Chance of Showers **80°/55°**

[Extended Forecast](#)

[Weather at Fermilab](#)

## Shapiro's powerful points add to impact of EPP2010



"We concluded that the US should aspire to a leadership role: not in terms of singular dominance, but taking the initiative at the frontiers," said Shapiro, chair of the EPP2010 panel. (Click on image for larger version.)

Harold Shapiro, the economist and former Princeton University president whose public service contributions range from policy advisory panels to the US Olympic Committee, says his dealings with particle physicists led to the first time he has been "induced" to use Power Point presentations. "I regard particle physicists as the aristocrats of Power Point," he told the Fermilab Annual Users Meeting on Thursday morning. "They intimidated me into using Power Point. So I made sure I spent a couple of weeks learning it before my presentation at SLAC a month or so ago."

Shapiro obviously learned well, delivering one powerful point after another in his explication and observations on the report of the National Academies'

## Augustine gives context for "Gathering Storm" report



"To many Americans who thought their jobs were safe, this new competitiveness trend is starting to look a bit like a depression," Augustine told a packed crowd in Ramsey Auditorium. (Click on image for larger version.)

In a public lecture at Fermilab on Wednesday, Norman Augustine explained how the findings of the National Academies' October report, *Rising Above the Gathering Storm: Energizing and Employing America for a Brighter Economic Future*, boiled down to two unavoidable realities. "[First] Individual prosperity in our nation, or any nation, depends to a very large degree on people having jobs, good jobs..." he said. "Second, we concluded that the existence of quality jobs in the decades ahead is very likely to depend on new developments in science and engineering."

The committee, composed of Nobel Laureates, university presidents, corporate CEOs and others, considered eight independent studies on societal

**Current Security Status**[Secou Level 3](#)**Wilson Hall Cafe****Friday, June 2**

- Beef Pepper Pot
- Buffalo Chicken Wings
- Cajun Breaded Catfish
- Sweet & Sour Pork over Rice
- Honey Mustard Ham & Swiss Panini
- Double Stuffed Pizza
- Carved Turkey

The Wilson Hall Cafe accepts Visa, Master Card, Discover and American Express.

[Upcoming Menu](#)**Chez Leon****Wednesday, June 7****Lunch**

- Poached salmon w/watercress sauce
- Spring Vegetable Medley
- Chocolate Kahlua Flan

**Thursday, June 8****Dinner**

- Nectarine Procuitto and Arugula Bundles
- Veal Saltimbocca
- Sautéed Spinach with Garlic
- Bowtie Pasta w/Pine Nuts and Parmesan
- Peach Melba

[Chez Leon Menu](#)

Call x4598 to make your reservation.

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EPP2010 panel, which he chaired, and which he is presenting around the country. He says he didn't especially like the title: "Revealing the Hidden Nature of Space and Time: Charting the Course for Elementary Particle Physics." But when he raised the point with reviewers, he said he was told: "It's too late not to like the title. It's already been approved."

Shapiro's candid, forthright presentation opened with the disclaimer (on a slide) that he was making "Informal Personal Observations (not approved by the National Academy of Sciences or the National Research Council)." His personal conclusions behind the report's official conclusions underscored the "current crisis in experimental particle physics." He declared, "It's hard to overestimate the critical nature of the next few years."

The challenge, Shapiro said, is to reverse the momentum of a program "that seems to be executing an exit strategy." He emphasized that especially at Fermilab, there were "very exciting experiments" being conducted. "But taking the longer view, as an outsider," he continued, "particle physics in this country does seem to be executing an exit strategy. To explain what I mean by an exit strategy: There is no compelling follow-on program established once the current program comes to an end."

[read more](#)

returns on public investment in science and technology. According to Augustine, one of these studies attributed 50-85 percent of US GDP growth during the last half century to science and technology, and noted these fields could have an even greater impact in the years ahead. He cited another study that attributed the formation of 4,000 new companies, and a full 1.1 million new jobs to graduate student research done, within the Massachusetts Institute of Technology alone, in the past decade. "It's been only half jokingly said that today a third of the GDP is attributable to quantum mechanics," he said.

Augustine warned of the impact of what's been called the "death of distance" on America's ability to compete in these fields. As new communications technology allows increasingly complex jobs to be handled from abroad, Americans face job competition not only from within their community, but from around the world. Augustine gave examples of American CAT scans read in India, American taxes prepared in Costa Rica, and blueprints for American buildings drawn by architects in Malaysia, among others. "There is no longer a 'there' there," he said, referring to the fact that jobs no longer depend on the location of the worker. He quoted academy member and former Federal Reserve Vice Chairman Alan Blinder, stating that 50 million, or about one third of today's US jobs are susceptible to being moved over seas. "It's been said that a recession is when your neighbor is out of work, and a depression is when you are out of work," said Augustine. "To many Americans who thought their jobs were safe; this new competitiveness

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## Staffin: Clear, cohesive message is the priority



Staffin seconded the conclusions of Harold Shapiro, chair of the EPP2010 panel, with concerns that the field was not moving in a coherent direction toward the future.

With cautious optimism over the state of the budget; with "blockbuster" reports issued over the last year; with major transitions for the Fermilab and SLAC programs in the next 2-4 years, and with LHC starting up in 2007, Robin Staffin verged on the dramatic in his assessment of the field of particle physics. "We're entering a period of great promise and scientific potential," said the DOE Associate Director, Office of High Energy Physics. "But it is also a period of great fingernail-biting."

Staffin seconded the conclusions of Harold Shapiro, chair of the EPP2010 panel, with concerns that the field was not moving in a coherent direction toward the future. "I need your help," Staffin told the Annual Users' Meeting on Wednesday afternoon. "The field requires, certainly an airing of all issues, but also a cohesiveness and clarity of message. With a fragmented community, I can only go so far, and I'm afraid I will

trend is starting to look a bit like a depression."

[read more](#)

## Fermi Singers perform today



The Fermi Singers will perform today at noon in the Ramsey Auditorium. Hear them sing international songs, and then stick around for complimentary refreshments.

### ILC NewsLine

## First US Processed ILC Cavity Achieves Milestone

Last week, after undergoing a buffered chemical polishing (BCP) treatment at Cornell University,

the first US purchased, processed and tested International Linear Collider superconducting cavity achieved a milestone



accelerating gradient of 26 MV/m (megavolts per meter). A joint effort of the SMTF (Superconducting Module Test Facility) collaboration, this accomplishment was a first test for the US facilities for ILC.

"This is a good achievement for the first step that we are going to take," said Hasan Padamsee of Cornell University. "ILC cavities have not been tested in the

fail. But with a cohesive community, I feel confident."

Staffin noted the eight percent increase for high-energy physics in the budget passed by the House of Representatives last week, and the doubling of funds for ILC R&D from \$30 million to \$60 million. "It's the most positive budget I've seen in my dozen or so years here," he said. He was also impressed by the impact of two sets of "blockbuster" reports. He said "Quantum Universe" and "Discovering the Quantum Universe" from HEPAP featured an approach that was "almost poetry." There were also "shocks heard around the world" from two National Academies reports, "Rising Above the Gathering Storm" from the panel chaired by Norman Augustine; and from the EPP2010 report, which he described as "the support we recognize we need to move on to the next generation of science."

--Mike Perricone

### In the News

#### From *DOE Press Release*, May 30, 2006:

#### Statements from Secretary of Energy Samuel W. Bodman on the Senate's Confirmation of Dr. Raymond Orbach as the Under Secretary for Science

WASHINGTON, DC – I thank the Senate for their confirmation of Dr. Raymond Orbach as the department's first Under Secretary for Science. President Bush has placed a renewed emphasis on strengthening our nation's basic science research and education as part of the American Competitiveness Initiative. Ray will help oversee the expansion of basic science research at the department, including the doubling of the

US yet, and none of our facilities have been checked out to that extent. We decided to do a standard treatment that has been done for some years now, and we got the best result that you can hope to get at this stage."

[Read More](#)

### Accelerator Update

#### May 31 - June 1

- Startup
- TeV receives permission to run beam
- Machine Reports

[Read the Current Accelerator Update](#)

[Read the Early Bird Report](#)

[View the Tevatron Luminosity Charts](#)

### Announcements

#### Bicycle Commuter Challenge

The Chicagoland Bicycle Federation's Bicycle Commuter Challenge is June 10-16. Riders are eligible for prizes and discounts at participating bike shops and other local businesses. See [the webpage](#) for details. Bicycle commuters can sign up and enter their miles on the [Fermilab Bicycle to Work Website](#).

#### Summer Muscle Toning Class

Gain strength, lean body mass, and increase muscle definition with the Recreation Facility's strength training classes held from 5:30-6:30 p.m. on Tuesdays and Thursdays. There are two four-week sessions: June 1 - June 27 and August 29 - September 28. Sessions cost \$32 each, and the registration deadline is Friday prior to the start of the session. You must be a Recreation Member to participate. Registration can be done by mail, fax x5207, in person in the Recreation Office or if you are using a credit card for payment, by phone.

government's basic science budget over the next decade. With additional focus on basic science, our nation will continue to be the economic leader of the world. I congratulate Ray on today's confirmation and look forward to his continued service to the department and the nation.

[Read More](#)

### **English country dancing**

English country dancing will continue at Fermilab's Barn, generally meeting the last Sunday afternoon of the month, will meet next on Sunday, June 25 at 2 p.m. Please contact folkdance@fnal.gov or call 630-584-0825 or 630-840-8194.

New [classified ads](#) have been posted on Fermilab Today.

[Upcoming Activities](#)