

Calendar

[Have a safe day!](#)

Monday, Sept. 20

2:30 p.m.

[Particle Astrophysics Seminar](#)

- One West

Speaker: Lorenzo Faccioli,
Lawrence Berkeley National
Laboratory

Title: Latest Constraints on
Dark Energy from the
Supernova Cosmology Project
(SCP) and Self Calibration

3:30 p.m.

DIRECTOR'S COFFEE

BREAK - 2nd Flr X-Over

4 p.m.

All Experimenters' Meeting -

Curia II

Special Topic: 30 KWatt CW at
650 MHz

Tuesday, Sept. 21

3:30 p.m.

DIRECTOR'S COFFEE

BREAK - 2nd Flr X-Over

4 p.m.

[Accelerator Physics and](#)
[Technology Seminar](#) - One

West Speaker: Mingqi Ge,

Fermilab Title: The

Development of New
Techniques for Surface Defect
Research at Fermilab

Click here for [NALCAL](#),
a weekly calendar with
links to additional
information.

[Upcoming conferences](#)

Campaigns

[Take Five](#)
[Tune IT Up](#)

Weather

Feature

October workshop to shape the future of U.S. detectors



Attendees at the upcoming Workshop on Detector R&D will work to create a national detector program.

Early in October, scientists from across the country will gather at Fermilab to put their heads together. They'll work to dream up future detector technologies and start to develop a national detector R&D program.

The [Workshop on Detector R&D](#) will take place Oct. 7-9 at Fermilab. Registration is now open. There is a \$10 registration fee.

The idea for this workshop came from a DOE review of detector R&D carried out at five national laboratories with a particle physics focus: Berkeley, SLAC, Fermilab, Brookhaven and Argonne. DOE recommended that the national laboratories develop a national program. The American Physical Society's Division of Particles and Fields joined as a co-sponsor.

Workshop co-chairs Marcel Demarteau and Chip Brock, who also chairs the DPF, are eager to see the entire scientific community engage in this discussion.

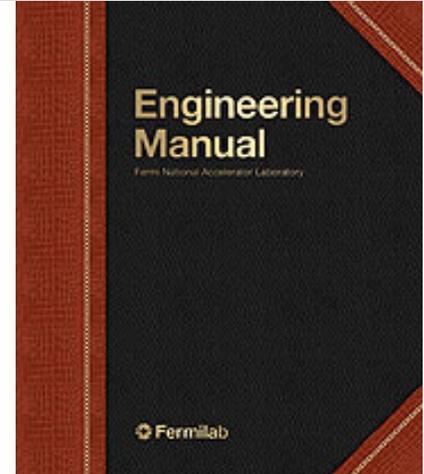
"A workshop of this nature has never been done before," Demarteau said. "This gives us a chance to bring the laboratory and university community together and learn about what others are working on."

University and laboratory attendees will get the opportunity to identify promising detector R&D areas, current challenges and the future needs of all stakeholders. Attendees will discuss the future of detector R&D in the U.S.,

ES&H Tips of the Week - Quality Assurance



Defend against Murphy's Law



Fermilab's *Engineering Manual*, pictured above, gives engineers a set of checks and balances to use when testing design and plans.

Most of us have heard of Murphy's Law. One of the first known statements of this law was in the 1940s when an instructor said, "Anything that can go wrong will, usually during the demonstration." It evolved into its current form, "Whatever can go wrong, will."

You can see efforts to thwart Murphy's Law in the laboratory's recently released *Engineering Manual* in the sections "[Engineering Design Review](#)" and "[Testing and Validation](#)."

A design review lets engineers in other disciplines check their plans for areas of potential problems. Testing and validation requirements provide checks to make sure the design works as intended.

When you don't consider possible negative outcomes and plan for ways to prevent them using documents such as the *Engineering Manual*, you can end up wasting time and money or, in the worst case scenario, injuring someone.

In 2004 the space capsule Genesis crashed into the ground. It was designed to be retrieved in the air by having a helicopter hook onto its deployed parachute. Failure analysis revealed that the parachute didn't deploy because redundant accelerometers used to trigger the deployment were installed backwards.

 Slight chance of thunderstorms
76°/65°

[Extended Forecast](#)
[Weather at Fermilab](#)

[Current Security Status](#)

[Secon Level 3](#)

[Wilson Hall Cafe](#)

Monday, Sept. 20

- Breakfast: croissant sandwich
- Italian minestrone soup
- Patty melt
- Baked chicken enchiladas
- Herb pot roast
- Chicken melt
- Assorted sliced pizza
- Szechuan green beans w/ chicken

[Wilson Hall Cafe Menu](#)

[Chez Leon](#)

Wednesday, Sept. 22
Lunch

- Stuffed eggplant
- Marinated garden salad
- Luscious lemon poke cake

Thursday, Sept. 23
Dinner

- Stuffed mushrooms
- Blackened grouper
- Dirty rice
- Maque choux
- Mocha fudge bread pudding

[Chez Leon Menu](#)

Call x3524 to make your reservation.

[Archives](#)

as it relates to national particle physics, astrophysics and other related areas of science.

"I believe that this workshop topic will become increasingly important," Demarteau said. "This workshop will offer an opportunity to be creative and form innovative ideas for new detector technologies."

Demarteau explained that the field needs new, transformative technologies. It has reached a point where scientists can no longer scale current technologies due to cost and space constraints and experiment complexity, he said.

The workshop is also a way for the national laboratories to involve the next generation of scientists.

"Collaboration among laboratory scientists and university faculty, post docs and students has long taken place in high-energy physics," Brock said. "The workshop will help us to envision how to grow this relationship."

While the program's focus is on the future of U. S. detector technology, Brock and Demarteau welcome input from international colleagues.

Posters are now being accepted. A data transmission working group will also convene on Oct. 6.

-- *Rhianna Wisniewski*

In the News

Little progress expected on key S&T appropriations and authorization bills

From *The AIP Bulletin of Science Policy News*, Sept. 14, 2010

Congress returned to Washington this week to a long list of appropriations and authorization bills awaiting action. Although the new fiscal year begins in less than three weeks, few anticipate that Congress will complete any of the appropriations measures funding science agencies, or pass bills reauthorizing NASA's programs, the America COMPETES Act, or elementary and secondary education. Congress will recess late this month or early in October for November's election, and then return for a lame duck session later that month.

APPROPRIATIONS BILLS:

Fundamental differences between the political

A checks and balances process similar to the one in Fermilab's *Engineering Manual* might have prevented some of the capsule's design issues. A design review might have caught that the accelerometer design allowed the parts to be put in backwards. Testing and validation review might have caught that the process design didn't control the orientation and that tests didn't check the design effectively.

So remember, when you plan a new task keep in mind that any process or part that depends on a low failure rate for mission accomplishment will (in time) fail. This is almost a statistical certainty.

-- *Office of Quality & Best Practices*

Accelerator Update

Sept. 15-17

- Three stores provided 33.5 hours of luminosity
- TRF3 repaired
- Trouble with TeV VME crate
- Temporary fix on MI-10 power supply
- Meson MTest experiments T-992 and T-995 began taking beam
- TeV SyncLite mirror adjusted
- NuMI turns off for eight days to check target helium leak

[Read the Current Accelerator Update](#)

[Read the Early Bird Report](#)

[View the Tevatron Luminosity Charts](#)

Announcements

Latest Announcements

[Indian Creek road closed until 3:30 p. m. today](#)

[Health and Wellness Fair - Sept. 23](#)

[Toastmasters - Oct. 7](#)

[There's still room in Family Science Time - Saturday, Sept. 25](#)

[Martial arts classes - today](#)

[Silk and Thistle Scottish dancing resumes at the Barn Tuesdays](#)

[Fermilab International Folk Dancing at the barn on Thursdays](#)

[Argentine Tango, Wednesdays](#)

[Fermilab Today](#)[Result of the Week](#)[Safety Tip of the Week](#)[CMS Result of the Month](#)[User University Profiles](#)[ILC NewsLine](#)[Info](#)*Fermilab Today*

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parties about spending and conflicting demands from the electorate dim the outlook for prompt passage of appropriations bills funding the Department of Energy, National Science Foundation, NASA, Department of Defense, National Institute of Standards and Technology, the U.S. Geological Survey, and the National Institutes of Health. Congress will pass legislation continuing current funding levels until final FY 2011 appropriations legislation is enacted, most likely in the form of an omnibus funding bill. When that omnibus bill passes will depend on the outcome of November's elections and whether party control of the House or Senate changes. What follows is a brief recap of the status of FY 2011 appropriations bills:

[Read more](#)[through Sept. 29](#)[Chicago Blackhawks pre-season discount tickets](#)[Workshop on Accelerator-Driven Sub-Critical Systems & Thorium Utilization](#)[Regal Movie Theater discount tickets available](#)[Gizmo Guys - Fermilab Arts Series - Sept. 25](#)[Submit an announcement](#)

Classifieds

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