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issues and events

months ahead. He invited industry and universities to participate and said the effort is “not something the government can or wants to do by itself.”

A White House fact sheet ([http://www.whitehouse.gov/sites/default/files/](http://www.whitehouse.gov/sites/default/files/microsites/ostp/big_data_fact_sheet_final_1.pdf)

[microsites/ostp/big_data_fact_sheet_final_1.pdf](http://www.whitehouse.gov/sites/default/files/microsites/ostp/big_data_fact_sheet_final_1.pdf)) lists dozens of ongoing federal programs that address challenges and opportunities afforded by big data in support of agency missions and science and innovation. **David Kramer**

news notes

Budget squeezes neutrinos. It's back to the drawing board for the Long-Baseline Neutrino Experiment (LBNE). In March the Department of Energy made clear that under current budget constraints it can't pony up \$1.5 billion for Fermilab's future flagship project.

The LBNE would shoot intense beams of neutrinos from Fermilab to a detector deep in South Dakota's Homestake gold mine. By observing changes in neutrino flavor occurring during the nearly 1300-km journey, scientists want to look for *CP* violation and hope to gain insight into the universe's disparity between matter and antimatter (see page 13 of this issue).

On 19 March William Brinkman, director of DOE's Office of Science, wrote to Fermilab director Pier Oddone asking that the lab “lead the development of an affordable and phased approach that will enable important science results at each phase. Alternative configurations to LBNE should also be considered.”

“Ideally we will preserve the opportunity to do the full-scope experiment in phases,” says Oddone. “But it re-

mains to be seen what we can stitch together.” Although a cost cap “has not yet been discussed,” Oddone says he's aiming to reduce the tab by half or more for the first phase of the project. “We should have a new path forward in June,” he says. **TF**

Magnetic record. A pulsed magnet at Los Alamos National Laboratory exceeded the coveted 100-tesla mark on 22 March. “This is our Moon shot. We've worked toward this for a decade and a half,” says Charles Mielke, director of the pulsed branch of the US National High Magnetic Field Laboratory.

Last summer the Los Alamos facility achieved 97.4 T (see *PHYSICS TODAY*, November 2011, page 25). The new high was reached by changing the waveform of the input current, says Mielke.

Higher fields have been reached, but only in magnets that self-destruct in the process. Strong magnetic fields are used to probe, for example, superconducting materials, topological insulators, and the quantum behavior of phase transitions in solids. **TF ■**

Recently on **physics today** online...

► Bookends

Books editor Jerney Matthews interviews Duke University biologist Sönke Johnsen (shown here) about his new book *The Optics of Life: A Biologist's Guide to Light in Nature* (Princeton University Press, 2012).



► Singularities

“Capacity building for industrial physics in developing and emerging economies” was the topic of this year's Industrial Physics Forum, which was held over three days last month at the Abdus Salam International Centre for Theoretical Physics in Trieste, Italy. Look in the Singularities department for reports of each day's talks.



◀ The Dayside

In his blog, *PHYSICS TODAY's* online editor Charles Day writes about careers in manufacturing, the violent formation of solar systems, the energy cost of barefoot running, and the need for a new social medium to promote science.

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