CAB meeting, Nov. 16, 2023

Press release

Fermilab's SQMS Center inaugurates quantum information science and technology facility: "The Quantum Garage"

November 6, 2023

https://news.fnal.gov/2023/11/fermilabs-sqms-center-inaugurates-quantum-information-science-and-technology-facility-the-quantum-garage/

Media for the Quantum Garage

Quantum Garage unveiled: Fermilab's new Batavia facility holds promise to unlock universe's secrets

From FOX 32 Chicago, Nov. 7, 2023

Fermilab opened a brand-new quantum laboratory known as the "Quantum Garage" intended to use quantum computing to expand the boundaries of science and engineering and find solutions to pressing challenges including national security, medicine and clean energy. The event on Nov. 6 was attended by officials from DOE, NASA and other national labs.

Yahoo News - repost from Fox News 32 Chicago (60.3M reach)

Quantum Garage unveiled: Fermilab's new Batavia facility holds promise to unlock universe's secrets

Chicago Business Journal (subscription only)

Chicago revs up commitment to quantum with new Fermilab facility

https://www.bizjournals.com/chicago/news/2023/11/06/fermilab-opens-quantum-garage.html

Daily Herald

Fermilab in Batavia unveils new 'Quantum Garage'

https://www.dailyherald.com/news/20231107/fermilab-in-batavia-unveils-new-quantum-garage

WAND-TV Springfield

Pritzker, Foster cut ribbon for Fermilab's new quantum research lab

https://www.wandtv.com/news/pritzker-foster-cut-ribbon-for-fermilabs-new-quantum-research-lab/article 31d09ab6-7cf4-11ee-98f1-1335607e91ef.html

WGEM Springfield

Gov Pritzker helps open SQM "Quantum Garage"

https://www.wgem.com/2023/11/06/gov-pritzker-helps-dedicate-new-quantum-garage-monday/

DUNE update

Prototype for DUNE detector will test new technology that can handle more neutrinos

Lab News

Eric Mieland, Fermilab Natural Areas win DOE Sustainability Awards

Eric Mieland, an environmental protection specialist at Fermilab, and Fermilab Natural Areas, each received <u>U.S. Department of Energy's 2023 Sustainability Awards</u> for positively shaping Fermilab's sustainability practices.

People

Fermilab welcomes new head of communication

Rae Moss began her role on Oct. 2, coming from Idaho National Lab, where she was the director of communications and external affairs and, most recently, the head of Pacific Northwest external engagement.

Pantaleo Raimondi to be new leader of Fermilab's accelerator project

World-renowned accelerator physicist, Pantaleo Raimondi will begin as the new project director of the Proton Improvement Plan II project/PIP-II's in December.

He comes to Fermilab from SLAC and has worked at particle physics facilities from around the world including CERN, ENEA-Frascati in Italy, INFN-LNF, in Rome and the European Synchrotron Radiation Facility, or ESRF, in France.

Awards

Two Fermilab scientists selected as 2023 APS fellows

Fermilab scientists, Chandrashekhara Bhat and Robert Zwaska, were selected, a distinction awarded each year to no more than one-half of 1% of current APS members by their peers.

Videos:

<u>Don Lincoln – Demystifying the Heisenberg Uncertainty Principle</u>

The Heisenberg Uncertainty Principle is one of the most non-intuitive concepts in all of quantum mechanics. It says that it is impossible to precisely know both an object's location and its motion. Know one well and you must know the other poorly. The origins of this are deeply tied to the wave nature of matter and the connection between waves and momentum. In this video, Fermilab's Dr. Don Lincoln sorts it all out.

Symmetry

Can we fit the universe in a box?

Wouldn't it be nice to have a computer answer all of the biggest questions in the universe?

Celebrating Dark Matter Day in Latin America

Scientists, artists, communicators and physics fans find creative ways to mark the unofficial holiday devoted to dark matter.

Physics fashion and collider couture

Symmetry is back with more physics-themed Halloween costumes.

New map of space precisely measures nearly 400,000 nearby galaxies

The Siena Galaxy Atlas will be a tool for research into how galaxies form and evolve, gravitational waves, dark matter and the structure of our universe.

Spacetime: All the universe's a stage

In the 1900s, Albert Einstein unified the concepts of space and time, giving us a useful new way to picture the universe.

CERN opens Science Gateway

About 1,400 people attended the grand opening of CERN's new science education center.

Antimatter falls down

Results from the ALPHA experiment confirm that matter and antimatter react to gravity in a similar way.

Listening to the radio on the far side of the moon

LuSEE-Night will demonstrate whether an experiment to search for ancient radio signals can survive the moon's unforgiving environment.

Fermilab in the news

Construction work at Fermilab near Kirk and Giese Roads

From Batavia Access Television, Nov. 6, 2023

Fermilab representatives provided an update about the upcoming LBNF site preparation work to members of the Batavia City Council on Nov.6. Starting this month, crews will prepare an area on the Fermilab site close to Kirk and Giese roads for the construction of the new facility for the Deep Underground Neutrino Experiment.

<u>DuPage Monarch Project recognizes outstanding contributions to pollinator conservation</u>

From the Daily Herald, Oct. 26, 2023

The Fermilab Natural Areas was one of three organizations who were recently recognized for their outstanding contributions to pollinator conservation. FNA received the Pat Miller Community Engagement Award for their comprehensive outreach and public engagement about ecology, native plants and land stewardship.

Muon g-2 experiment measures the positive muon anomalous magnetic moment to 0.20 ppm

From Phys.org, Nov. 8, 2023

The Muon g-2 collaboration recently reported a new measurement of the so-called positive muon magnetic moment anomaly to a precision of 140 parts per billion. The collaboration's findings are published in the journal Physical Review Letters.

Unlocking the Universe's secrets

From Chicago Magazine, Oct. 10, 2023

Chicago Magazine talks with Brendan Casey and Brendan Kiburg on the Muon g-2 results announced in August.

North Central College professor lends a hand to Fermilab in Muon g-2 experiment

Naperville Community Television, Oct. 24, 2023

Naperville News 17 talks with Dr. Paul Bloom, an associate professor at North Central College, about the college's role in the latest results of the Muon g-2 experiment.

Finding the secret of human existence in an atom-smasher

From Big Think, Nov. 6, 2023

Kmele Foster, host of Dispatches from The Well, visited Fermilab last spring to speak with scientists about how exploring the mysteries at the heart of particle physics can help us better understand some of the most profound mysteries of our universe. This Big Think production features Bonnie Fleming, Don Lincoln, Doga Kurkcuoglu and Rachel Pfaff.