



What's new at Fermilab?

Community Advisory Board meeting

January 25, 2024

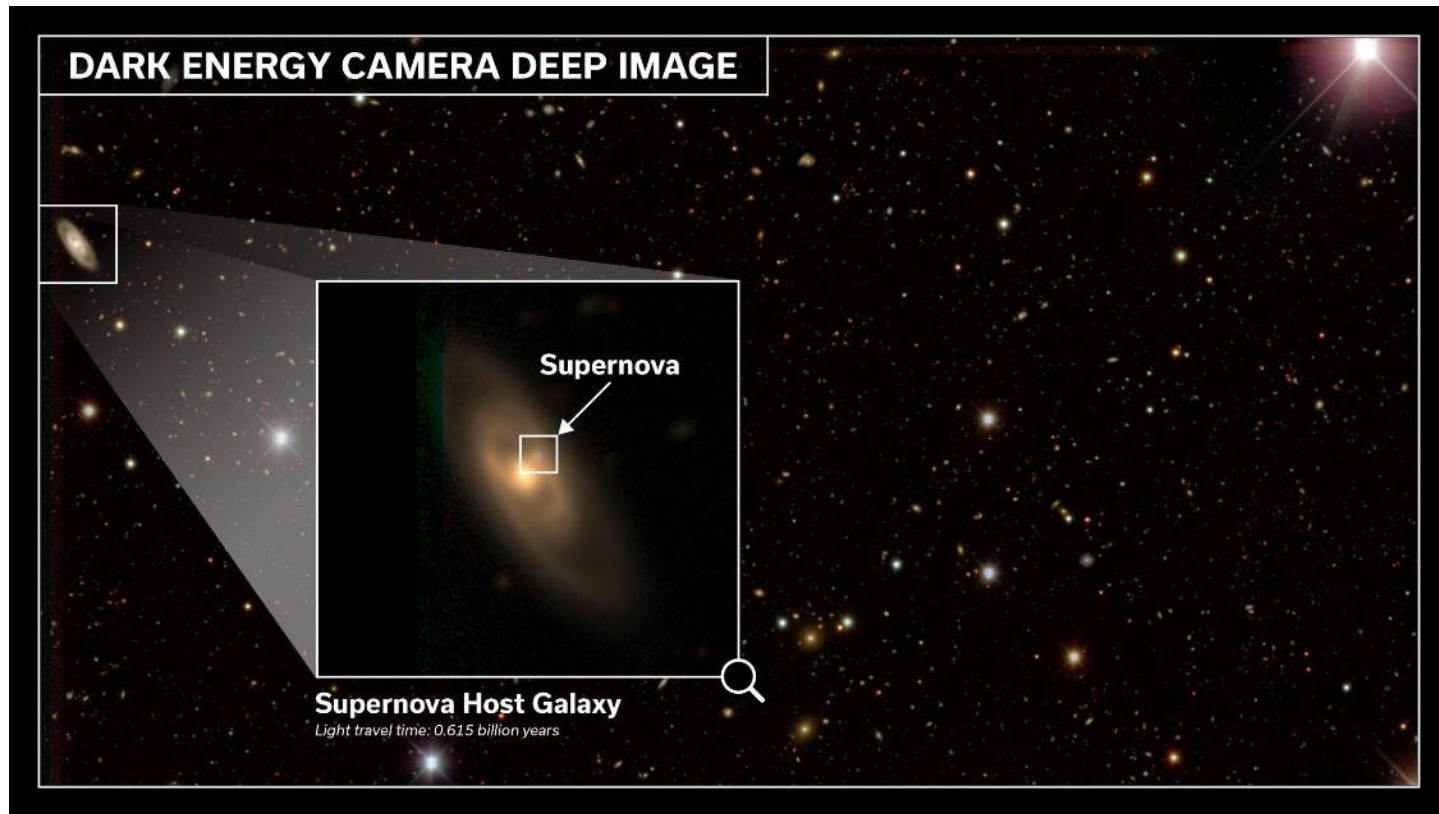
Office of Communication

2023 highlights video on YouTube



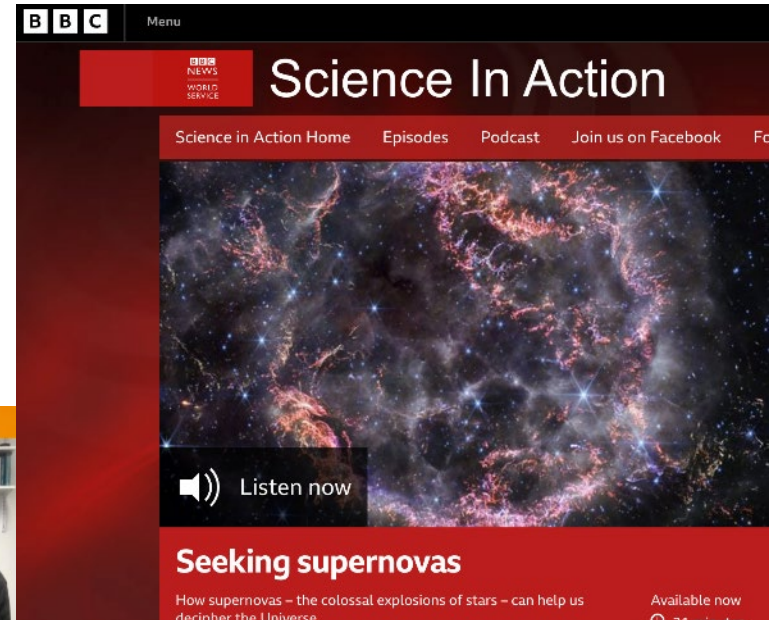
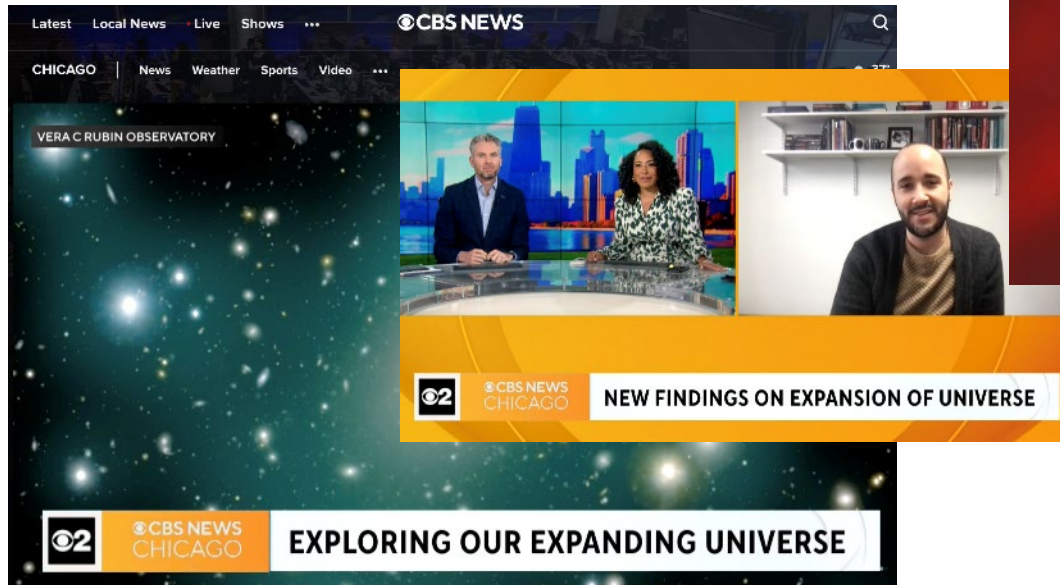
The year 2023 brought many highlights: major science results, construction, ribbon cuttings, records and much more. Get a quick, 3-minute recap of our 2023 milestones in this video, which features footage from around the lab.

Dark Energy Survey result announcement – Jan. 8



The culmination of over a decade of research with new analysis that reaffirms with greater confidence that the universe's expansion is accelerating due to some unknown source of energy called dark energy.

DES media coverage

The logo for the magazine 'Astronomy', featuring the word 'Astronomy' in a white, serif font on a black rectangular background.The logo for SPACE.com, with the word 'SPACE' in a large, bold, white sans-serif font and '.com' in a smaller font to its right, all on a black rectangular background.

SPACE
UNO

Decade-long Dark Energy Survey offers new insights into the expansion of the universe

DUNE update – MOU signing Dec. 6, 2023

International science organizations sign agreement to provide hardware for the Deep Underground Neutrino Experiment



DUNE update

First components for DUNE experiment arrive in Lead, SD on Jan. 16



Lab News

Fermilab hosts successful Outdoor Family Fair



On Sunday, Oct. 22, Fermilab's Office of Education and Public Engagement hosted its Outdoor Family Fair, which brought the public to the lab to enjoy educational activities about some of its science, as well as to get a close look at Fermilab's diverse site.

Lab News

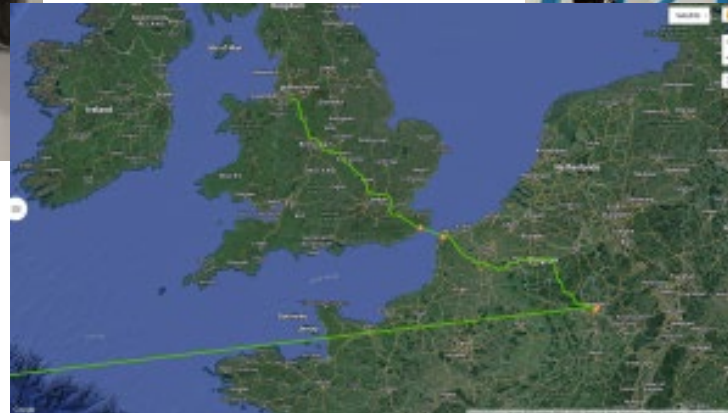
Fermilab's Integrated Engineering Research Center to begin operations



The DOE has awarded Fermilab the Project Completion and Start of Operations approval for its award-winning Integrated Engineering Research Center. Known as CD-4, the last of the Critical Decisions in the DOE Project Management of Capital Assets process, this approval affirms Fermilab's completion of construction and readiness to operate this new state-of-the-art facility.

Lab News

PIP-II team successfully transports first cryomodule between U.K. and Fermilab



The fully equipped prototype of a cryomodule is one of the many components that will be part of the new linear particle accelerator at Fermilab.

The PIP-II team tracked the prototype cryomodule with a GPS device as it traveled from Fermilab to Daresbury Laboratory in the United Kingdom. This map shows the European leg of its journey.

Lab News

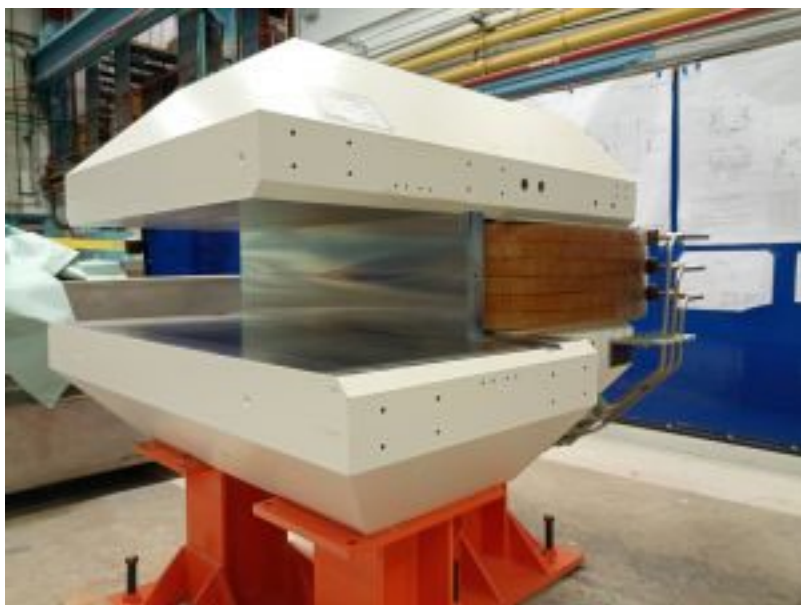
First U.S.-built focusing magnet for LHC upgrade arrives at CERN



On Dec. 18, the physics laboratory CERN a 13-meter-long assembly comprising two magnets with 4.2-meter-long coils. These are the first U.S.-built magnets for the high-luminosity upgrade to the Large Hadron Collider.

Lab News

Fermilab completes unique set of magnets for accelerator upgrade at Oak Ridge



Two large magnets built by Fermilab's Magnet Systems Department for Oak Ridge's Spallation Neutron Source.

Awards



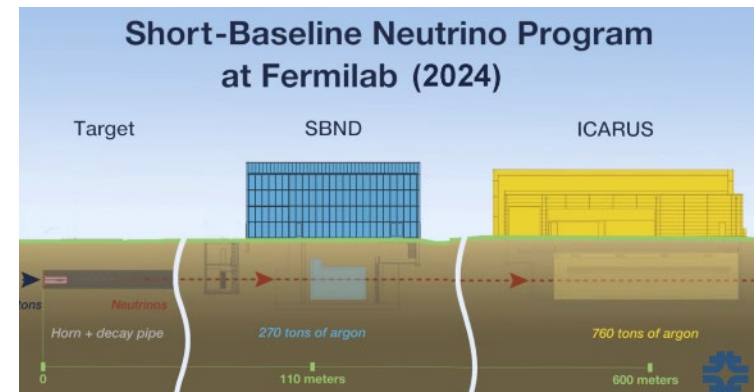
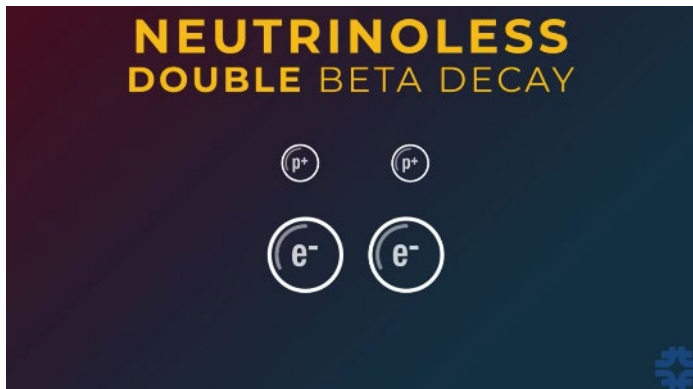
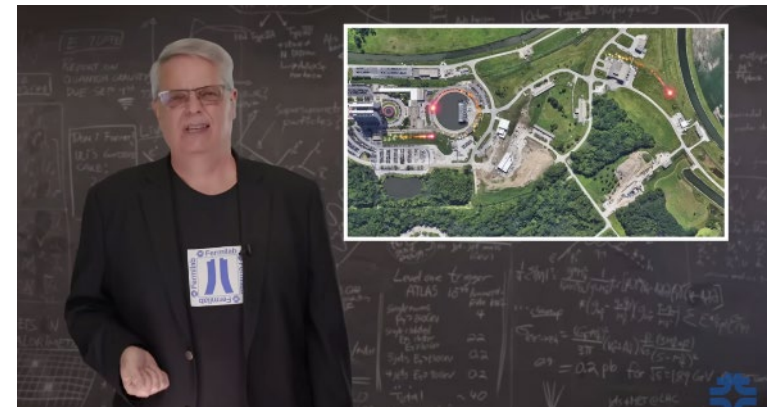
Fermilab scientist Nicholas Pohlman received a \$850,000 [grant](#) through DOE's Reaching a New Energy Sciences Workforce initiative to provide funding for Pohlman's proposal to bring students from underrepresented groups at NIU to Fermilab. DOE's [RENEW initiative](#) supports internships, training programs and mentor opportunities at 65 different institutions.

New Fermilab videos

Even Bananas – Are neutrinos their own antiparticle?



Don Lincoln – Fermilab's search for sterile neutrinos





01/18/24

A day in the life of a mountaintop telescope builder

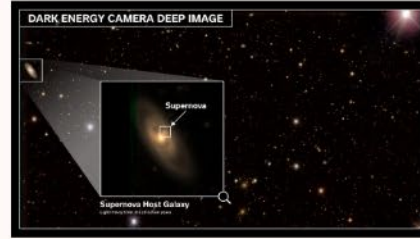
Margaux Lopez is one of a team of engineers preparing the Vera Rubin Observatory in Chile for the arrival of the largest digital camera ever built for astrophysics and cosmology.



01/09/24

Science fiction inspires a new astrophysics university class

A professor at the University of Tennessee reimagines the way we teach STEM with a science-fiction story-based class.



01/08/24

Final supernova results from Dark Energy Survey offer unique insights into the expansion of the universe

In the culmination of a decade's worth of effort, the DES collaboration of scientists analyzed an unprecedented sample of more than 1,500 supernovae classified using machine learning.



12/19/23

Bringing eclipsed women of astronomy and physics into the light

In *Her Space, Her Time*, physicist Shohini Ghose elucidates the stories of women scientists who contributed to and led some of the biggest breakthroughs in astronomy and physics.



Fermilab in the news

AXIOS Chicago

Chicago is emerging as a quantum tech hub



Justin Kaufmann



The region was recently designated a [quantum technology hub](#) by the U.S. Department of Commerce, which will bring federal funding to area universities.



Submitted Content

Fermilab's Wilson Hall opens its doors to the public again



Fermilab and its iconic Wilson Hall is open for guided tours on the third Monday of each month starting on Feb. 19. *Courtesy of Daniel Svoboda, Fermilab*

The Fermilab opening of Wilson Hall on January 23, 2024

Fermilab in the news

LOCAL NEWS >

Report on future of particle physics outlines exciting scientific priorities

 By Adam Harrington
December 7, 2023 / 8:38 PM CST / CBS Chicago

[f](#) [X](#) [v](#)



BIG THINK

NEWSLETTERS

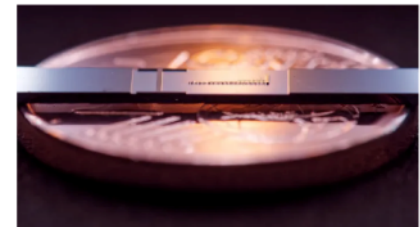
FOR BUSINESS

MEMBERSHIP

HARD SCIENCE — NOVEMBER 17, 2023

How pocket-sized particle accelerators could treat cancer

The miniaturization of particle accelerators could disrupt medical science.



Credit: FAU / Laser Physics, Stefanie Kraus, Julian Litzel

Fermilab in the news

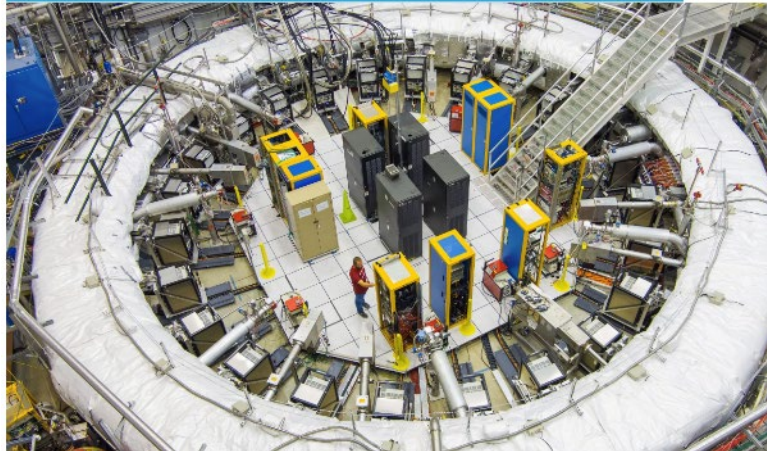
physicsworld

Fermilab's MINERvA makes the list of *Physics World* 2023 Breakthroughs of the Year

Top 7 innovation stories of 2023 — Interesting Engineering

From wearables to new forces of nature these are the top 7 innovation news of 2023 that you need to know.

3. New force of nature discovered by scientists at Fermilab



Fermilab in the news



Fermilab's 'muon shot' could see suburban lab become site of revolutionary particle collider

An influential panel of the world's top particle physicists is recommending exploring building the most powerful collider on Earth to help unwind the universe's mysteries.

Questions?