

May 22, 2025

The latest news from Fermilab

Office of Communication
Community Advisory Board



U.S. DEPARTMENT
of **ENERGY**

Fermi National Accelerator Laboratory is managed by
FermiForward for the U.S. Department of Energy Office of Science



Spring at Fermilab welcomes the arrival of two baby bison
The first baby bison was born on April 21. To date there are 16 new calves.



An aerial, high-angle photograph of a large stadium, showing the dense, tiered seating areas that curve around a central field. The perspective is from directly above, looking down into the bowl of the stadium. The seating is a mix of light and dark colors, creating a textured, grid-like pattern. The central field is visible at the bottom center, though less detailed due to the high angle.

From the newsroom



From the newsroom

8 stories were posted in the Fermilab newsroom
between March 28 – May 22

Fermilab-funded research demonstrates new method for 3D printing
high-temperature superconductors

April 28, 2025

1,200 views

Cristian Boffo appointed director of Fermilab's particle accelerator
upgrade project

April 21, 2025

742 views

Engineering innovation meets history in groundbreaking neutrino
experiment hosted by Fermilab

April 8, 2025

520 views



Sample superconducting 3D printed
material



PIPII at Fermilab



The aircart Maggie II used to move steel
beams doe DUNE



From the newsroom

Fermilab hosts 2025 CMS Data Analysis School for next generation of collider physicists

April 3, 2025

359 views

Cristian Boffo appointed director of Fermilab's particle accelerator upgrade project

April 21, 2025

742 views

New ceramic material for high-power particle accelerators enhances reliability

May 6, 2025

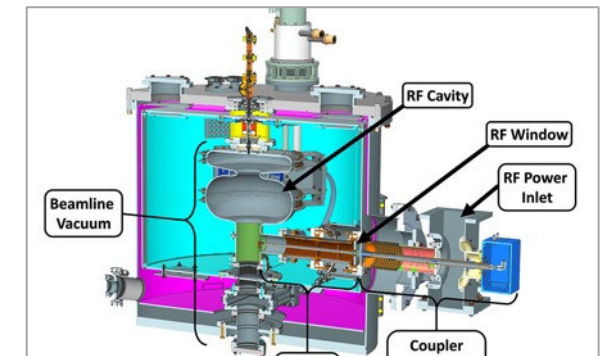
351 views



CMS Data Analysis School



Peter Garbincius, scientist emeritus and senior scientist Robert Zwaska



A cross section of an SRF accelerator



From the newsroom – press releases

5 new press releases since May 28

[Fermilab opens applications for 2025 Global Physics Photowalk contest](#)

May 15, 2025

397 views

[Fermilab researchers advance quantum sensing for future detectors](#)

May 7, 2025

575 views

[Spring at Fermilab welcomes the arrival of two baby bison](#)

April 21, 2025

2,200 views

[Fermilab-led computing project receives large 2025 DOE INCITE award](#)

April 9, 2025

529 views

[Sowjanya Gollapinni elected co-spokesperson for DUNE collaboration](#)

April 2, 2025

358 views



The SMSPD research team.



The first bison calf was born April 21, 2025.



The new DUNE co-spokesperson, senior scientist Sowjanya Gollapinni



Social media

Have we detected
primordial black holes?

?

#AskFermilab
**BLACK
HOLE
WEEK**

#AskFermilab: Black Holes

Fermilab celebrated Black Hole Week with a series of video answering questions from our audience.

- Videos published May 5-9
- Received over 140 questions between April 15-19
- In total the Shorts received over 140k views

Top posts by views

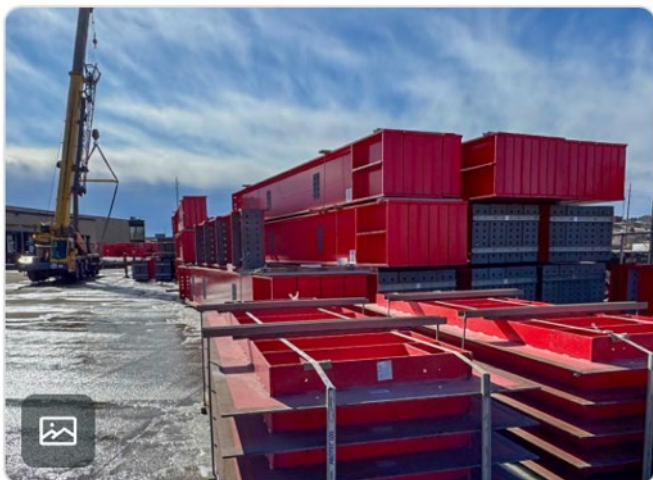


fermilab

Fri 3/28/2025 3:05 pm CDT



Exciting update! All the steel that will house one of the detectors for #DUNEscience has arrived. 🙌 In total, the steel weighs 3,282 U...



Views

46,274



Fermi National Accelerator ...

Wed 4/23/2025 11:05 am CDT



Have you herd the news? 🐾 Two baby bison were born this week at Fermilab! 🙌 Visitors are encouraged to stop by to see the newest...



Impressions

42,286



fermilab

Thu 4/24/2025 12:54 pm CDT



Happy #NationalPhysicsDay! What are we made of? How did the universe begin? What secrets do the smallest, most elemental...



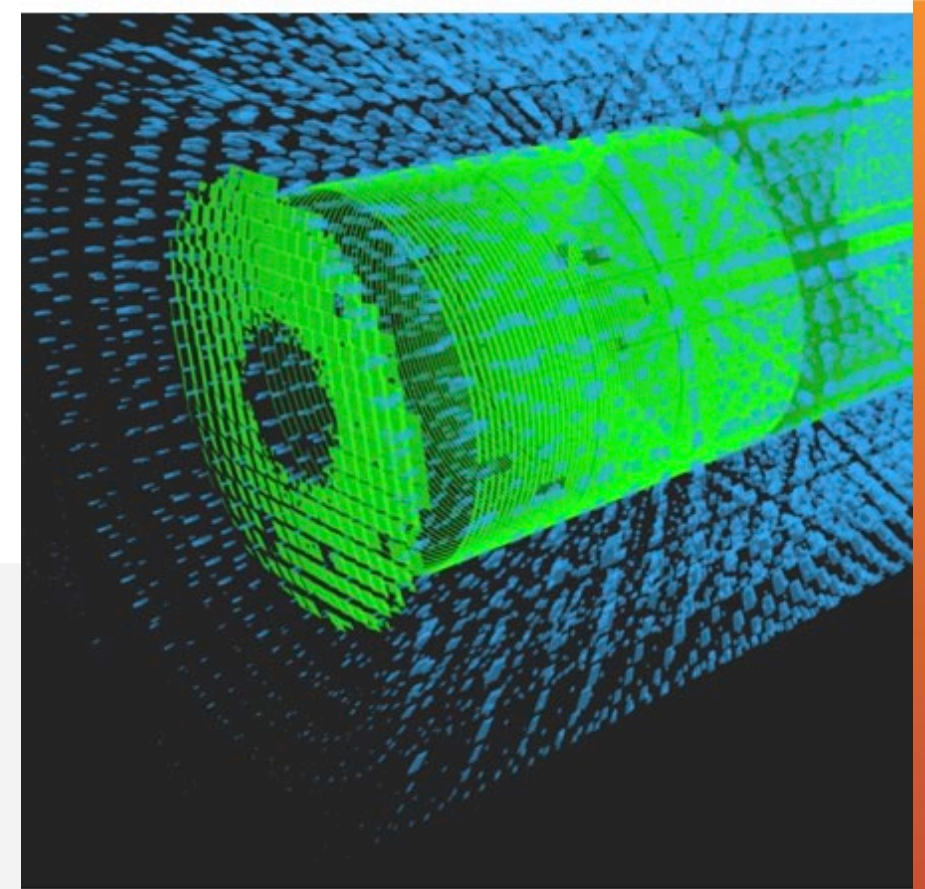
Views

24,387



Special mention: CMS Splashes video

- Collaborated with the CMS experiment on Instagram
- Received a total of 25k views across YouTube and Instagram



**CMS
EXPERIMENT**

2025 splashes

👁 9,399



Fermilab In the News

DUNE In the News



Scientists in a race to discover why our Universe exists

2 days ago

Share Save

Pallab Ghosh

Science Correspondent • @BBCPallab

Gwynndaf Hughes

Science Videographer and Producer



Matthew Kapust / SURF

A vast cavern in South Dakota shielded from the outside world will house sensitive equipment to detect tiny changes in sub-



Dune: the international megaproject that attempts to unravel the origin of the universe and Brazil's fundamental participation

Based in the US, the R\$20 billion experiment has a grand structure and aims to answer questions about the formation of black holes and the emergence of matter.

X-ARAPUCA

Um **detector de luz** com paredes internas refletivas e filtro que vai **registrar a interação entre o neutrino e o argônio líquido** e transformar em algo visível, possibilitando a análise dos cientistas



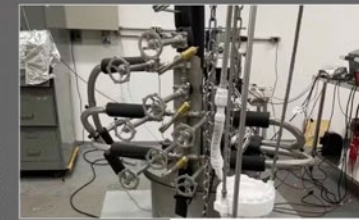
Fonte: Unicamp e Fermilab
Infográfico elaborado em: 30/04/2025



O estudo só será possível com o auxílio de duas tecnologias desenvolvidas por cientistas da Unicamp

PURIFICAÇÃO DE ARGÔNIO LÍQUIDO

O argônio serve como "veículo" para a ação dos neutrinos. É nele que a partícula vai "navegar" e reagir - mas, para isso acontecer, o **argônio precisa ser ultra puro** e isso só será possível graças ao **método desenvolvido no Brasil**



Capaz de reduzir o oxigênio do argônio líquido em 80%



DUNE In the News

Fermilab actively seeking housing for personnel

By Wendy Pitlick Black Hills Pioneer Apr 1, 2025 0



Engineering innovation makes history in groundbreaking neutrino experiment hosted at Fermilab

Apr 11, 2025 0



SURF to lower beams for DUNE cryostats starting next year

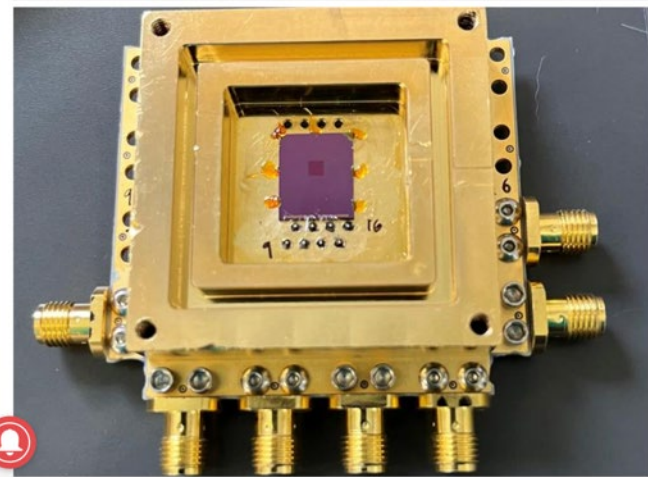
SDPB | By Lee Strubinger
Published May 12, 2025 at 10:36 PM CDT



Quantum news

Quantum sensors power the future of particle physics

Quantum 28th April 2025



VoxelMatters

Researchers 3D print high-temperature superconductors

The Fermilab-funded technique is currently awaiting US patent approval

Edward Wakefield · April 29, 2025

4 minutes read



A sample of a superconductor 3D printed from a single seed — this one shaped like a paper airplane — is shown levitating over a magnet. Credit: Dingchang Zhang. Source: Fermilab.

INTERESTING ENGINEERING

New 4D quantum sensors may help physicists trace the birth of space and time

The search for exotic particles and dark matter could get a major boost from 4D quantum detectors.

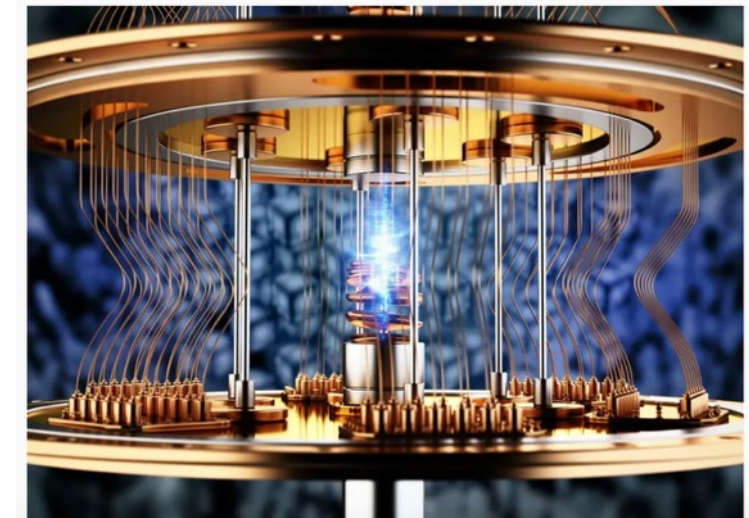
Updated: Apr 24, 2025 04:10 PM EST



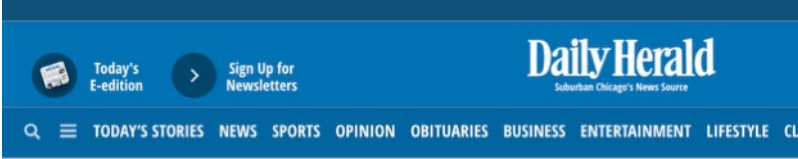
Aamir Khollam



a month ago

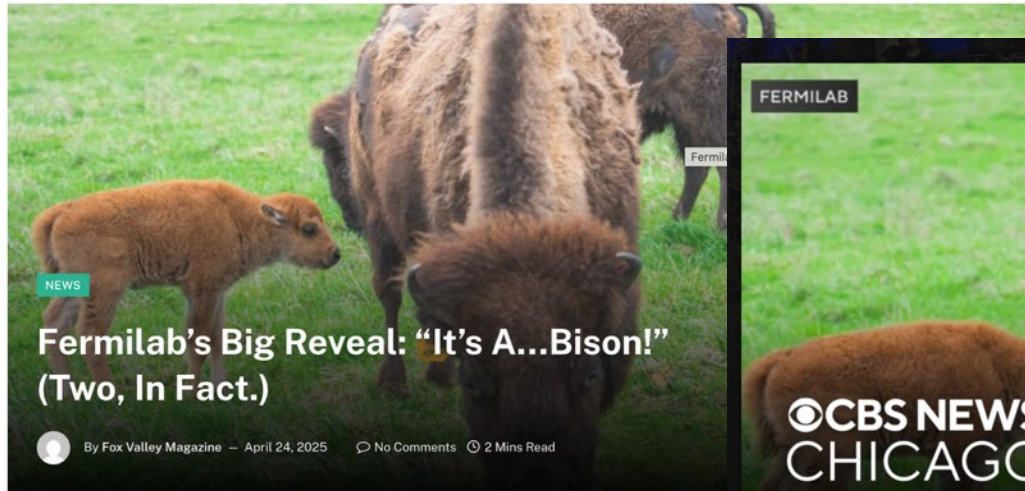
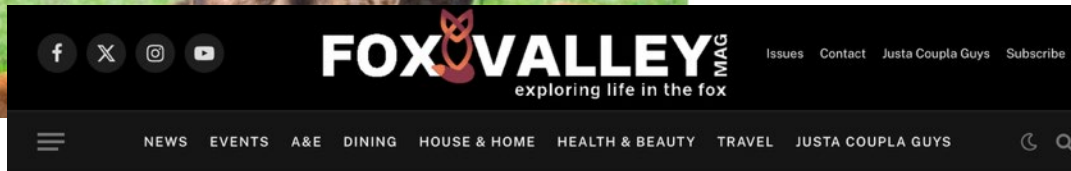


Fermilab's first bison, April 21

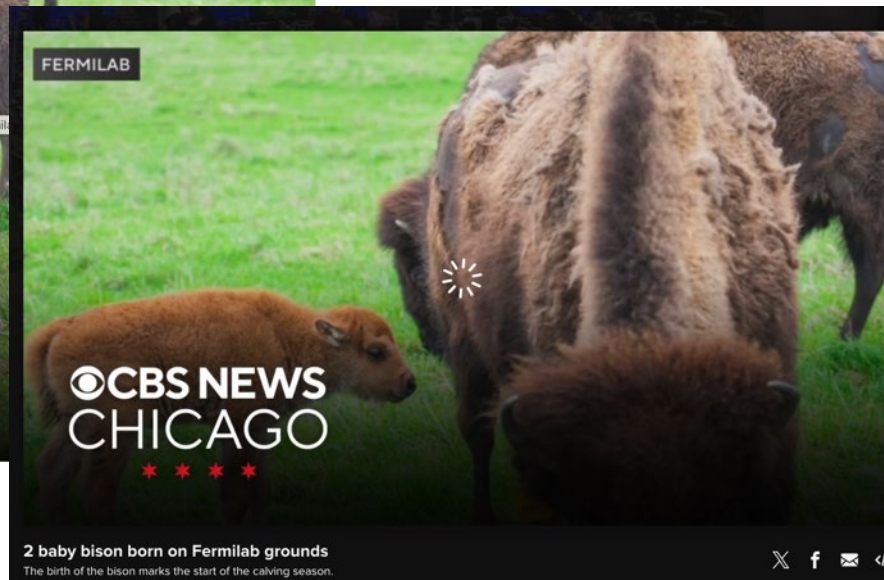


Pets and Animals

Fermilab welcomes first two baby bison of the season



First two baby bison of the spring born to herd at Fermilab in Batavia



Patch

Batavia, IL

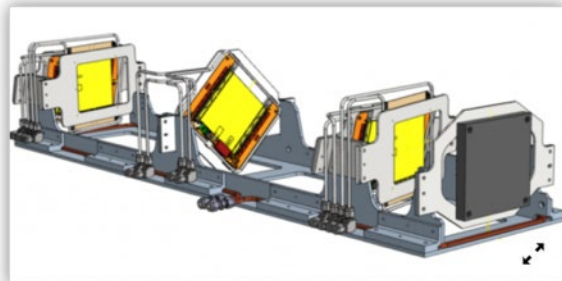
Northlandia: How northern Minnesota aids study of ghost-like particles

For more than two decades, a particle beam has been aimed at the Arrowhead, where researchers have been trying to understand neutrinos. But it will soon be pointed to South Dakota.

Future Muon Experiment Could Search for Dark Matter

April 22, 2025 • Physics 18, s50

The planned MUonE experiment could—in addition to studying the muon's magnetic moment—search for dark matter particles.



Physics

CERN COURIER | Reporting on international high-energy physics

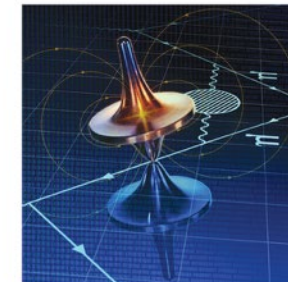
Physics ▾ Technology ▾ Community ▾ Magazine

STRONG INTERACTIONS | FEATURE

Do muons wobble faster than expected?

26 March 2025

With a new measurement imminent, the *Courier* explores the experimental results and theoretical calculations used to predict ‘muon $g-2$ ’ – one of particle physics’ most precisely known quantities and the subject of a fast-evolving anomaly.



Vacuum fluctuation The fine details of “hadronic vacuum polarisation” could be the difference between reinforcing the SM and challenging it. Credit: D Zemba, Pennsylvania State University

Fundamental charged particles have spins that wobble in a magnetic field. This is just one of the insights that emerged from the equation Paul Dirac wrote down in 1928. Almost 100 years later, calculating how much they wobble – their “magnetic moment” – strains the computational sinews of theoretical physicists to a level rarely matched. The challenge is to sum all the possible ways in which the quantum fluctuations of the vacuum affect their wobbling.



Website updates



Website updates – New Phone Book for the public

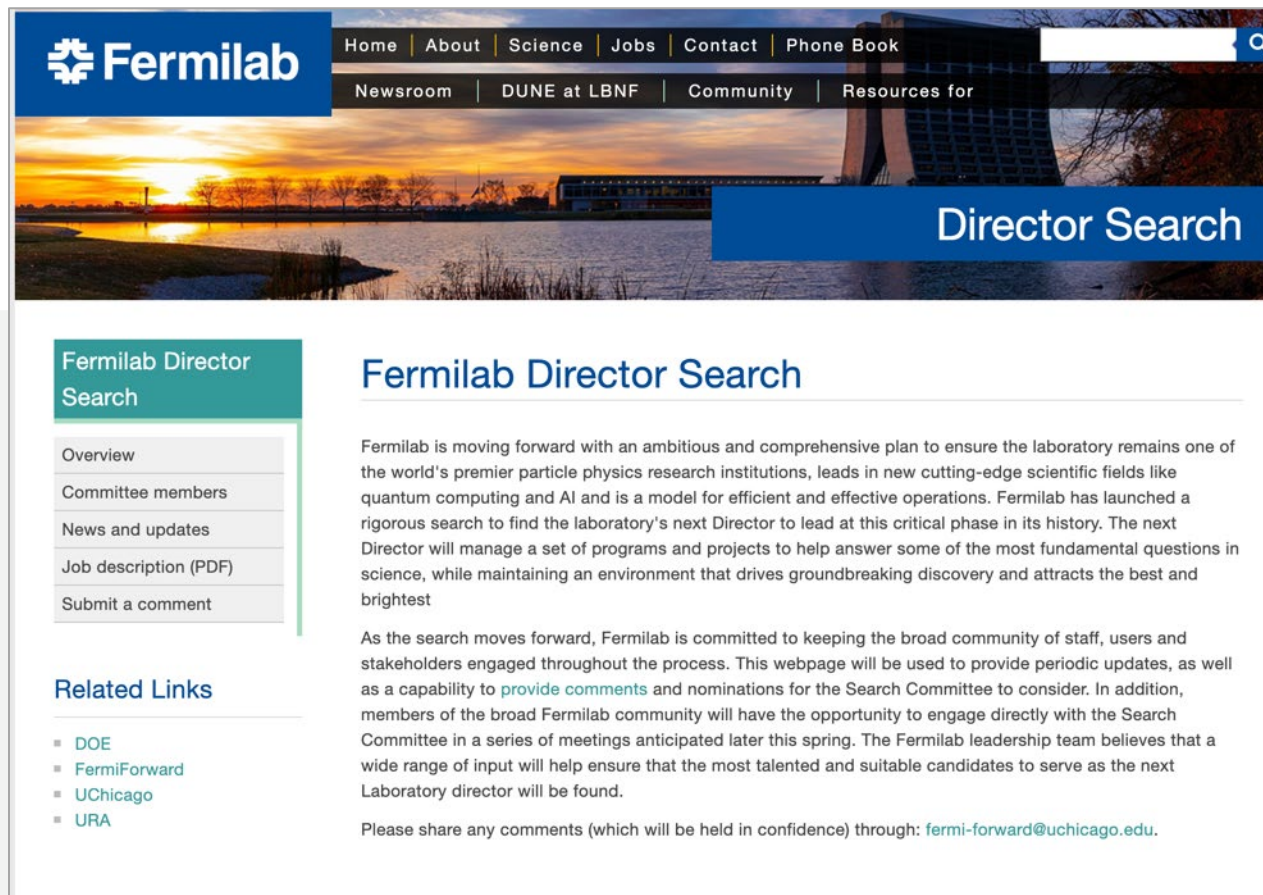
- In April 2025, Fermilab launched a new public-facing Phone Book at <https://www.fnal.gov/staff-directory/>, reflecting the lab’s ongoing commitment to protecting personal information. To access it, use the convenient “Phone Book” link located in the top navigation of each lab webpage.
- The updated staff directory allows the public to securely view an employee’s name, primary work number, and to submit messages via a contact form, without revealing the employee’s actual email address. This approach balances transparency with data protection. We appreciate your support as we enhance our cybersecurity practices.

Website updates – New director search webpage

A new page is live on the Fermilab website to keep the Fermilab community updated on the search for the lab next director.

This effort reflects the commitment of Fermi Forward Discovery Group and Fermilab leadership to support robust engagement and an inclusive process.

The goal is to complete the search and have the new laboratory director in place by the end of the year.



The screenshot shows the Fermilab website's 'Director Search' page. The header features the Fermilab logo and navigation links: Home, About, Science, Jobs, Contact, Phone Book, Newsroom, DUNE at LBNF, Community, and Resources for. A search bar is located in the top right. The main banner image shows a sunset over a body of water with a building in the background. A blue box on the right side of the banner reads 'Director Search'.

Fermilab Director Search

- Overview
- Committee members
- News and updates
- Job description (PDF)
- Submit a comment

Related Links

- DOE
- FermiForward
- UChicago
- URA

Fermilab Director Search

Fermilab is moving forward with an ambitious and comprehensive plan to ensure the laboratory remains one of the world's premier particle physics research institutions, leads in new cutting-edge scientific fields like quantum computing and AI and is a model for efficient and effective operations. Fermilab has launched a rigorous search to find the laboratory's next Director to lead at this critical phase in its history. The next Director will manage a set of programs and projects to help answer some of the most fundamental questions in science, while maintaining an environment that drives groundbreaking discovery and attracts the best and brightest

As the search moves forward, Fermilab is committed to keeping the broad community of staff, users and stakeholders engaged throughout the process. This webpage will be used to provide periodic updates, as well as a capability to [provide comments](#) and nominations for the Search Committee to consider. In addition, members of the broad Fermilab community will have the opportunity to engage directly with the Search Committee in a series of meetings anticipated later this spring. The Fermilab leadership team believes that a wide range of input will help ensure that the most talented and suitable candidates to serve as the next Laboratory director will be found.

Please share any comments (which will be held in confidence) through: fermi-forward@uchicago.edu.



Website updates – New Photowalk website

As part of the 2025 Global Photowalk event organized by the Interaction Collaboration, Fermilab has launched a new Photowalk website with information on the local photo contest and a sign-up form.

Photographers will be able to capture behind the science areas at Fermilab for a chance to be entered into the international competition this fall.

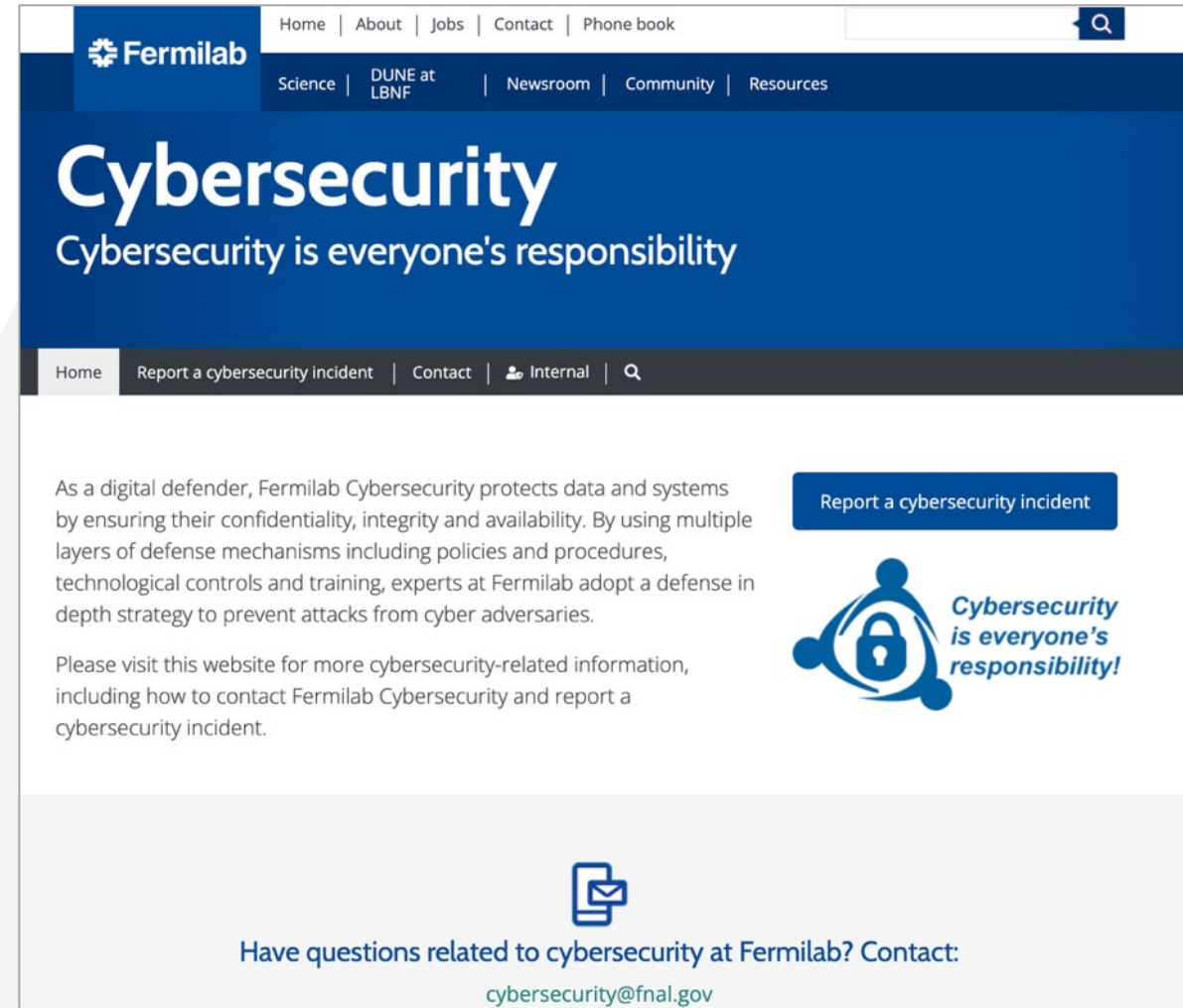
Fermilab has started accepting applications limited for the Fermilab Photowalk day scheduled for Saturday, July 26, 2025, from 8 a.m. to 12 p.m. Space is limited. Participants must submit the [online application](#) by June 1, 2025.



Website updates – New Photowalk website

Fermilab launched a new Cybersecurity public website at <https://cybersecurity.fnal.gov/> and updated its internal site for employees, users and affiliates.

These websites include cybersecurity-related resources, such as how to report cyber incidents and guidance on the categories of high-risk personally identifiable information (PII) at Fermilab. The internal website also features helpful information for system administrators and scientists.





Fermi*FORWARD*



U.S. DEPARTMENT
of ENERGY