

CAB meeting links for September 23, 2021

DUNE update

Discover Magazine

The Quantum Technology Industry Is Creating Entirely New Jobs

<https://www.discovermagazine.com/technology/the-quantum-technology-industry-is-creating-entirely-new-jobs>

Discovery, Science Channel

Underground Marvels-buried lab of the Black Hills

<https://www.sciencechannel.com/show/underground-marvels-science>

Black Hills Pioneer

What a blast!

Fermilab design manager for DUNE Joshua Willhet takes readers 4,850 feet underground to view and describe the excavation of the tunnels that will make way to the caverns of the LBNF for DUNE.

https://www.bhpioneer.com/local_news/what-a-blast/article_5649cd94-0c09-11ec-9fc5-cf17fc9e1785.html

Our Northern Hills

Mini crew recognized for fire response

The Thyssen Mining crew working the morning of July 20 evacuated a burning house rescuing a man who was seriously injured in the fire.

https://rapidcityjournal.com/community/northern-hills/mining-crew-recognized-for-fire-response/article_afd01e49-d02d-5006-87de-620940a598d0.html

Videos

Don Lincoln

The super bizarre quantum eraser experiment

<https://www.youtube.com/watch?v=l8gQ5GNk16s>

Don Lincoln

Quantum mechanics and the double slit experiment

<https://www.youtube.com/watch?v=nmxwVU88Bd8>

What is quantum mechanics really all about?

https://www.youtube.com/watch?v=K0VY9_hB_WU

Even Bananas

[Even Bananas 10: How do neutrino oscillations work?](https://www.youtube.com/watch?v=eBT1-dV1BTM)

<https://www.youtube.com/watch?v=eBT1-dV1BTM>

[Even Bananas 11: How do we study neutrino oscillation?](https://www.youtube.com/watch?v=X_MK0iAQC3o)

https://www.youtube.com/watch?v=X_MK0iAQC3o

Blackfoot poetry: from Einstein to spacetime – Public lecture by Dr. Corey Gray

<https://www.youtube.com/watch?v=9iGUfzOe7Js>

Symmetry

Bringing the whole self to science

https://www.symmetrymagazine.org/article/bringing-the-whole-self-to-science?utm_source=newsletter&utm_medium=email&utm_campaign=ft-210915

Curious physics results could shed light on dark matter

https://www.symmetrymagazine.org/article/curious-physics-results-could-shed-light-on-dark-matter?utm_source=newsletter&utm_medium=email&utm_campaign=ft-210908

Teaching a particle detector new tricks

https://www.symmetrymagazine.org/article/teaching-a-particle-detector-new-tricks?utm_source=newsletter&utm_medium=email&utm_campaign=ft-210827

The search for the sterile neutrino

https://www.symmetrymagazine.org/article/the-search-for-the-sterile-neutrino?utm_source=main_feed_click&utm_medium=rss&utm_campaign=main_feed&utm_content=click

LHCb discovers longest-lived exotic matter yet

https://www.symmetrymagazine.org/article/lhcb-discovers-longest-lived-exotic-matter-yet?utm_source=newsletter&utm_medium=email&utm_campaign=ft-210805

A collective strategy for physics in Africa

African physicists and other researchers are creating a grassroots strategy for the future of physics research and education.

https://www.symmetrymagazine.org/article/a-collective-strategy-for-physics-in-africa?utm_source=newsletter&utm_medium=email&utm_campaign=ft-210811

News

Sloan Digital Sky Survey receives award for early, groundbreaking work in science data management

https://news.fnal.gov/2021/09/sloan-digital-sky-survey-receives-award-for-early-groundbreaking-work-in-science-data-management/?utm_source=newsletter&utm_medium=email&utm_campaign=ft-210921

The Daily Herald

Casten, Underwood highlight infrastructure bill's environmental positives

Two US Representatives and the White House National Climate Advisor toured Fermilab and Argonne this week to promote the economic and environmental benefits of President Biden's proposed infrastructure plan that passed a U.S. Senate hurdle earlier in the day.

<https://www.dailyherald.com/news/20210810/casten-underwood-highlight-infrastructure-bills-environmental-positives>

Naperville Community Television

Casten, Underwood Tour Northern Illinois Facilities with White House Official

<https://www.nctv17.com/news/casten-underwood-tour-northern-illinois-facilities-with-white-house-official/>

WBBM radio Chicago

Craig Dellimore

Representatives Casten and Underwood visit Fermilab with Gina McCarthy.

<https://mms.tveyes.com/Transcript.asp?StationID=6465&DateTime=8%2F10%2F2021+7%3A35%3A49+PM&Term=Fermilab+%2Blaboratory&PlayClip=TRUE>

Popular Science

What the heck is a time crystal, and why are physicists obsessed with them?

Physicists around the world have been constructing another state of matter: a time crystal using a quantum computer. Fermilab's quantum computer researcher Gabriel Perdue discusses the quantum computer's role in creating and studying time crystals and how they may be used in the future.

<https://www.popsci.com/science/what-is-time-crystal-physics/>

Fermilab's Chris Polly wins 1 of 10 Falling Walls Awards in physical sciences, remains finalist for Science Breakthrough of the Year 2021

https://news.fnal.gov/2021/09/fermilabs-chris-polly-wins-1-of-10-falling-walls-awards-in-physical-sciences-remains-finalist-for-science-breakthrough-of-the-year-2021/?utm_source=newsletter&utm_medium=email&utm_campaign=ft-210908

SQMS Center announces the addition of Rutgers University-New Brunswick to its growing collaboration

<https://news.fnal.gov/2021/08/sqms-center-announces-the-addition-of-rutgers-university-new-brunswick-to-its-growing-collaboration/>

URA names John Mester next executive director and chief executive officer

John Mester as its next executive director and chief executive officer.

URA is a consortium of more than 90 leading research universities that has been responsible for managing and operating Fermilab since 1967.

https://news.fnal.gov/2021/08/ura-names-john-mester-next-executive-director-and-chief-executive-officer/?utm_source=newsletter&utm_medium=email&utm_campaign=ft-210826

Fermilab's Benjamin Hansen wins award for leadership in cryogenics operations, support

<https://news.fnal.gov/2021/08/fermilabs-benjamin-hansen-wins-award-for-leadership-in-cryogenics-operations-support/>

Drilling for Neutrinos

https://news.fnal.gov/2021/08/drilling-for-neutrinos/?utm_source=newsletter&utm_medium=email&utm_campaign=ft-210805

Zhicai Zhang wins 2021 URA Thesis Award

https://news.fnal.gov/2021/08/zhicai-zhang-wins-2021-ura-thesis-award/?utm_source=newsletter&utm_medium=email&utm_campaign=ft-210806

Scientist Brian Nord receives DOE award to accelerate AI use in cosmology

<https://news.fnal.gov/2021/07/scientist-brian-nord-receives-doe-award-to-accelerate-ai-use-in-cosmology/>

Pedro Machado wins 2021 URA Early Career Award

<https://news.fnal.gov/2021/07/scientist-brian-nord-receives-doe-award-to-accelerate-ai-use-in-cosmology/>

People

Chris Polly Falling Walls award

https://news.fnal.gov/2021/09/fermilabs-chris-polly-wins-1-of-10-falling-walls-awards-in-physical-sciences-remains-finalist-for-science-breakthrough-of-the-year-2021/?utm_source=newsletter&utm_medium=email&utm_campaign=ft-210908

Anna Grasselino named top in Italy

[Anna Grasselino: the Sicilian scientist who designs the most powerful quantum computer in the world.](https://www.nellanotizia.net/scheda_it_105885_Anna-Grassellino--la-scientziata-siciliana-che-progetta-il-computer-quantistico-pi%C3%B9-potente-al-mondo_1.html)

The scientist who directs the project for the construction of a super computer is Sicilian: Anna Grassellino, originally from Marsala, who has been the Deputy Chief Technology Officer at Fermilab in Chicago since 2019.

https://www.nellanotizia.net/scheda_it_105885_Anna-Grassellino--la-scientziata-siciliana-che-progetta-il-computer-quantistico-pi%C3%B9-potente-al-mondo_1.html

Congratulations to the three winners of this year's URA awards. Fermilab scientist Saskia Charity won the URA Tollestrup Award, Fermilab theorist [Pedro Machado](#) won the URA Early Career Award, and Caltech graduate student [Zhikai Zhang](#) won the URA Thesis Award.

Fermilab's Benjamin Hansen wins award for leadership in cryogenics operations, support

<https://news.fnal.gov/2021/08/fermilabs-benjamin-hansen-wins-award-for-leadership-in-cryogenics-operations-support/>