



Fermilab at Home

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Community Advisory Board

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Who have been the Fermilab education office's core audiences and how have we reached them?

- Teachers bringing students for field trips and attending teacher workshops
- High school students attending like the STEM Career Expo and Saturday Morning Physics
- Young students who come for Science Adventure classes
 - And their parents!
- The general public interested in learning more physics or about Fermilab



Virtual Education Resources

New ways to virtually connect to the lab

- Resources gathered at our new “Families” webpage:
 - Grid of activities for students from grades 3–12, using the 5E education model to connect them into coherent strands. Helpful for those learning from home.
 - Recreating in person experience with virtual resources from the Lederman Science Center
 - Guidance for parents new to working with students at home

Particle Physics	Astrophysics	Prairies	Art	Arch
100	100	100	100	1
200	200	200	200	2
300	300	300	300	3
400	400	400	400	4
500	500	500	500	5

Team 1 Team 2 Team 3



Virtual Events

Online versions of Fermilab Education Office events:

- The remaining classes from the Winter Saturday Morning Physics session were held on later dates as online events
- Virtual STEM Career Expo now online and interactive

Winter Session, 2020

January 9, 2020 | aearly



Please go to ed.fnal.gov for information regarding the cancellation of the remaining Winter 2020 session.

Lecture topics and dates are subject to change. The schedule will be updated accordingly.

Schedule of Online Lectures held via Zoom

Date	Lecture Topic	Speaker, Affiliation	Video Link
24-March-20	Informal Q&A – Standard Model	SMP Team	Video of Zoom Q&A on March 24
3-April-20	Galactic Astrophysics	Noah Kurinsky, Fermilab	Video of 4/3 Zoom Lecture
10-April-20	Extragalactic Cosmology	Adam Anderson, Fermilab	Video of 4/10 Zoom Lecture
17-April-20	Energy and Climate	Dan Hooper, Fermilab	Video of 4/17 Zoom Lecture
23-April-20	LHC Physics Keynote Presentation	Karrie DiPetrillo, Fermilab Christian Herwig, Fermilab Alexx Perloff, University of Colorado Boulder	Video of 4/23 Zoom Lecture
1-May-20	Nuclear Physics	Bryan Ramson, Fermilab	Video of 5/1 Zoom Lecture

Social Media

Social media engagement:

- We have ramped up our Twitter offerings to include the very popular “#CanYouGuess” feature, in which we ask our followers a question about particle physics, as well as:
 - #FNALFieldFinds and #FNALTreeID: natural science features captured in our backyards
 - #FNALatHome: activities for parents and kids to do together
 - #DidYouKnow: facts about Fermilab science and education



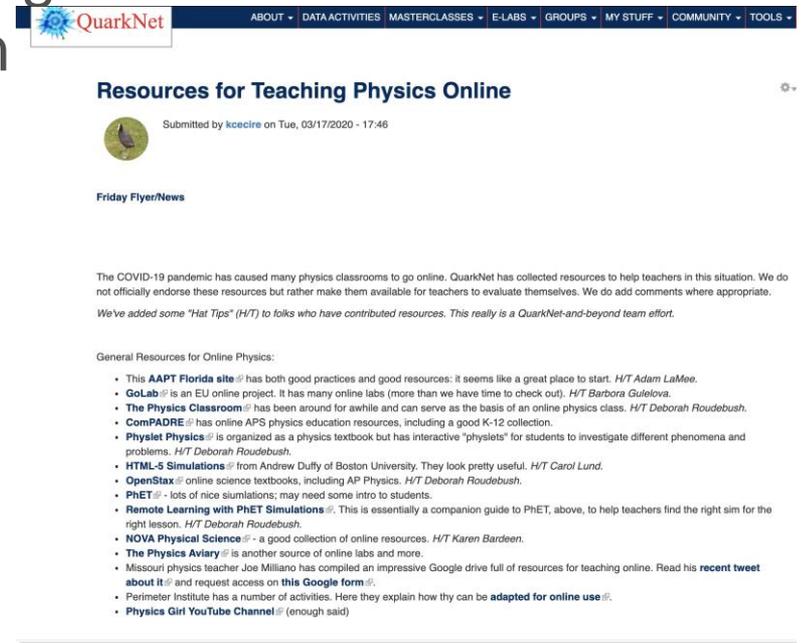
The image shows a screenshot of the Twitter profile for the Fermilab Ed Office (@FermilabEd). The profile header includes a back arrow, the name "Fermilab Ed Office", and "976 Tweets". Below this is a large profile picture showing a group of people on a grassy lawn in front of a long, low building. To the right of the profile picture is a "Follow" button. The bio reads: "Education Office at Fermilab. Bringing Science Education to you!". Location is "Batavia, IL", website is "ed.fnal.gov", and it was "Joined June 2009". It shows "92 Following" and "2,455 Followers". A list of users followed is shown below. The tweet section is active, with tabs for "Tweets", "Tweets & replies", "Media", and "Likes". The selected tweet is from 8m ago and says: "The @Fermilab Arts and Lecture series is bringing the art gallery to you! Follow them on Facebook @FermilabArtsLectures to view some incredible pieces of art! This incredible picture was taken by Martin Murphy: Aurora Borealis over Fermilab's Wilson Hall, November 2004". Below the text is a photograph of the Aurora Borealis (Northern Lights) over a building at night.

QuarkNet

QuarkNet's audience is primarily high school physics teachers; the QuarkNet program is focusing on providing them resources to enhance their teaching:

- Created a central page of resources from QuarkNet, Fermilab, and a wide variety of organizations dedicated to physics education; updated often

- General Resources for Online Physics
- Resources from Fermilab
- Particle Physics Resources



The screenshot shows the QuarkNet website header with navigation links: ABOUT, DATA ACTIVITIES, MASTERCLASSES, E-LABS, GROUPS, MY STUFF, COMMUNITY, TOOLS. Below the header is a post titled "Resources for Teaching Physics Online" submitted by kceelre on Tue, 03/17/2020 - 17:46. The post includes a "Friday Flyer/News" section with a text block: "The COVID-19 pandemic has caused many physics classrooms to go online. QuarkNet has collected resources to help teachers in this situation. We do not officially endorse these resources but rather make them available for teachers to evaluate themselves. We do add comments where appropriate. We've added some 'Hat Tips' (HT) to folks who have contributed resources. This really is a QuarkNet-and-beyond team effort." Below this is a "General Resources for Online Physics:" section with a bulleted list of resources including AAPT Florida site, GoLab, The Physics Classroom, ComPADRE, Phislet Physics, HTML-5 Simulations, OpenStax, PHET, Remote Learning with PhET Simulations, NOVA Physical Science, The Physics Aviary, and Perimeter Institute.

Arts and Lecture Series at Home

- Two confirmed virtual lectures with more in the works
- Home for virtual art gallery events
- Events by our artists in residence
- Virtual Physics Slam
- Exploring hosting virtual music events

[Fermilab's Batavia site is currently closed to the general public. View more details.](#)

The Fermilab Arts and Lecture Series serves as an open door between Fermilab and our neighboring communities by offering a diverse array of performing arts performances and lectures that celebrate the artistic and intellectual vision of the lab.

Fermilab Arts in the News

[Forbes Magazine](#) features David Ibbett, our guest composer, as well as Chris Klapper and Patrick Gallagher, 2020 Artists-in-Residence

See David's latest installment – [Particle of Doubt](#)

Introducing Fermilab Arts & Lectures (At Home)

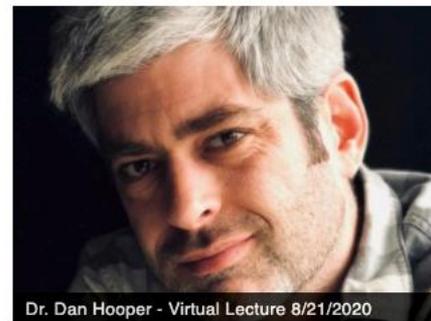
Upcoming Virtual Lectures

- July 31 – Dr. Rebecca Thompson
- [At the Edge of Time: Exploring the Mysteries of our Universe's First Seconds](#) – August 21 – Dr. Dan Hooper

Welcome David Ibbett – 2020 Guest Composer!

David visited Fermilab recently, touring various experiments and locations on campus. We can't wait to hear the results of his musical explorations in Spring, 2021! If you'd like to follow along, [subscribe](#)

Purchase tickets with no fees.



Dr. Dan Hooper - Virtual Lecture 8/21/2020

