Spread the word to your colleagues.
Find interesting opportunities and resources in the Fermilab Education Office E-Alert newsletter. E-mail sdahl@fnal.gov to be added to or deleted from our mailing list.

Calendar
2017 is Fermilab’s 50th anniversary, and we’re planning to celebrate all year long. Public events will include an anniversary kickoff party with Chicago band Mucca Pazza in January, a special Family Open House in February, anniversary-themed Arts and Lecture Series events and a huge open house in the fall. Sign up for our monthly newsletter, Fermilab Frontiers, to stay informed of our upcoming events, and watch Fermilab’s website for more information as the anniversary approaches.

For Families
February 12 – Fermilab Family Open House
Spring 2017 – Wonders of Science

For High School Students
April 19 – Science, Technology, Engineering and Mathematics High School Career Expo

For Teachers
November 14 – Northern Illinois Science Educators Conference. See us there!
February 19 (Deadline) – Teacher Research Associates Program at Fermilab
March 3 – NGSS Science and Engineering Practices Institute Day (open registration workshop)
March 6 (Deadline) – FFSE Scholarship Application Site will open November 28.

Elementary Teachers
June 19–21 – The Prairie – Our Heartland
June 22–23 – Insects at Work in Our World
July 31–August 4 – Phriendly Physics

Middle Level Teachers
July 17–21 – Beauty and Charm

High School Teachers – Summer Secondary Science Institutes
June 19–23 – Summer Secondary Biology Institute
June 19–23 – Summer Secondary Physics Institute
June 26–30 – Summer Secondary Physics Institute

We are in the process of updating our high school institutes to incorporate the Next Generation Science Standards and provide a related Fermilab field trip experience. See website for updates.

What we’re planning
Scholarships for Teacher Workshops, Science Adventures and Transportation
http://ed.fnal.gov/ffse/ed_ffse_scholarships.html
Funding for professional development for teachers and enrichment for students such as doing science in the field is becoming increasingly difficult for schools. We also know that not all families have the opportunity to enroll students in science and math enrichment classes. Fermilab Friends for Science Education offers scholarships for teachers to attend summer workshops and to assist
with field trip transportation expenses, and provides scholarships to families for student classes held at Fermilab. The online scholarship application form will open November 28. Deadline to apply is March 6 for workshops held during summer 2017 and field trips for school year 2017–2018. Applicants will be notified by April 3, 2017.

**Teacher Research Associates Program at Fermilab**
http://trac.fnal.gov

Appointments through the Teacher Research Associates (TRAC) program are expected to be available for Summer 2017. TRAC program goals are to provide outstanding science, mathematics, computer science and technology teachers with professional scientific, engineering or technical experiences through summer research opportunities. Participants can transfer their increased awareness and understanding of cutting-edge science and technology back to the classroom. The eight-week appointments have a stipend of $700 per week. See details on the website. The expected application deadline is February 19, 2017.

**Science Adventures**
http://ed.fnal.gov/sciad

Science Adventures, informal classes for students in grades PreK–10, continue on Saturday throughout the school year. See the home page link for Science Adventures for a listing of current classes. Interested in being a Science Adventures instructor? Contact Susan Dahl.

Teachers, are you planning a STEM Family Night at your school? Attend the **STEM Family Night Planning Workshop** on October 20, 7:00–9:00 p.m. This session includes facilitator training for the Hands-on Science exhibit collection. After attending the HoS facilitator training (part of the STEM Family Night Planning Workshop) you qualify to borrow a set of five physical science hands-on activity exhibits that demonstrate the concepts of momentum and acceleration. Exhibits include a 4’ x 6’ gravity accelerator, two tabletop exhibits, the Linac Accelerator to explore waves and the “shape shooter” to explore the geometry of a hidden shape, a variety of ramps and curves, and the 2.5’ x 5’ gravity collider. Send a minimum of two representatives from your public library, PTA organization or school for facilitator training. Fermilab provides free delivery, pickup and loan of the Hands-on Science collection. Details and registration through Science Adventures.

**Classroom Presentations**
http://ed.fnal.gov/trc_new/demos/

Fermilab volunteers offer presentations to enhance your classroom curriculum. If your school is within reasonable driving distance of the Lab, Fermilab scientists, engineers and technicians bring presentations on physical science topics to your students. Presentations are geared toward students in grades 2 through 12 and are free of charge to classrooms. Select a topic related to your curriculum, a few optional days, and read the "Additional Information" link regarding how many presentations and students can be accommodated.

**Save the Date**

**Fermilab Family Open House**
February 12, 2017 – 1:00 p.m.–5:00 p.m.
http://ed.fnal.gov/ffse/openhouse/

**Next Generation Science Standards Science and Engineering Practices Workshop**
March 3, 2017 – 8:30 a.m.–2:30 p.m. Open registration. Check the website calendar as details are made available.

**Science, Technology, Engineering and Mathematics High School Career Expo**
April 19, 2017 – 5:30 p.m.–8:30 p.m.
http://ed.fnal.gov/programs/careerfair/

Wonders of Science
Spring 2017 – 1:00 p.m.–5:00 p.m.
http://ed.fnal.gov/events/wos/

From the Teacher Resource Center
Are you looking for **STEM or engineering materials, science or math curriculum** for your classroom? The Teacher Resource Center has a current and growing collection of materials at all grade levels. Schedule time to examine the materials or discuss free NGSS or targeted professional development for your school or district.
http://ed.fnal.gov/trc

What We’re Reading
More and more resource materials are being published on engineering curricula and incorporating the “E” in STEM. Here is a sampling of the many materials you can use in the TRC.


For more details on programs, follow any of these links from the home page:
*Quick Links to Programs* links to “Teacher Workshops.” Use the “Calendar.”
"Search Programs" lets you set the parameters for programs of interest to you.
Use the “Educators” tab or [follow the links](http://ed.fnal.gov) listed below.

Like the [Fermilab Education Office Facebook Page](http://ed.fnal.gov).
If you are a Facebook member, you’ll receive updates from us if you "Like" our page. Join a group. When logged into Facebook, go to the top search box and search for "Fermilab Teacher Resource Center“ and click "Ask to Join Group" on the top right. As a member, you can read and post questions and comments to the other members of this group. You can also have online chats with other members of the group. We may add groups in the future for other areas of interest.

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