

20-MINUTE LIVECASTS

Live from CERN

The CERN laboratory in Switzerland is home to the most complex physics machine ever built, the Large Hadron Collider. See the CMS experiment and facilities through a livecast and connect with our partners across the Atlantic.

Technical Campus, IARC Lecture Hall: 11:50 a.m.-12:10 p.m., 12:30-12:50 p.m., 1:10-1:30 p.m., 1:50-2:10 p.m.

Live from the Dark Energy Camera

For four years, the Fermilab-built Dark Energy Camera has been surveying the southern sky from a Chilean mountaintop. Connect with our colleagues in Chile to see the control room and giant camera, which is looking for evidence of the force that is accelerating the expansion of our universe.

Wilson Hall, One West: 11:50 a.m.-12:10 p.m., 12:30-12:50 p.m., 2:30-2:50 p.m., 3:10-3:30 p.m.

Live from the Sanford Underground Research Facility

The Deep Underground Neutrino Experiment is Fermilab's flagship mega-science project. Fermilab will send a beam of neutrinos all the way to South Dakota to a giant particle detector located at the Sanford Underground Research Facility. Get a glimpse of the high-tech laboratory now located in a former gold mine in Lead, South Dakota, and see the future home of DUNE.

Wilson Hall, One West: 10:30-10:50 a.m., 11:10-11:30 a.m., 1:10-1:30 p.m., 1:50-2:10 p.m.

PRESENTATIONS, SHOWS AND DEMOS

Dynamic Forces

Enjoy a hands-on, interactive exploration of the interdependence of forces and motion that we encounter in our lives every day.

Lederman Science Education Center: 10:30 a.m., 12 p.m., 2 p.m.

Fermilab: A Frontier History

How did the lab start? What has it discovered? Where did the bison come from? Find out the answers to these and other questions at this talk by Fermilab Archivist and Historian Valerie Higgins. **Wilson Hall, second floor, Curia II: 11:50 a.m.-12:50 p.m. and 2:30 p.m.-3:30 p.m.**

Artist-in-Residence

Fermilab 2017 artist-in-residence Jim Jenkins discusses his residency artwork, inspired by the science at Fermilab.

Wilson Hall, second floor, Curia II: 10:30-11:30 a.m.

Fermilab Art Gallery

Curator Georgia Schwender presents on Fermilab's first and only artist, Angela Gonzales, whose work leaves its indelible imprint on the Fermilab aesthetic to this day.

Wilson Hall, second floor, Curia II: 1:10-2:10 p.m.

Mr. Freeze Cryogenic Show

Mr. Freeze demonstrates the very cool effects of liquid nitrogen in this exciting, kid-pleasing 45-minute show. Mr. Freeze's show is a free, ticketed event. Visitors may pick up their tickets in the Wilson Hall atrium. Tickets are first-come, first-served. **Wilson Hall, Ramsey Auditorium: 10:30-11:15 a.m., 12-12:45 p.m., 1:30-2:15 p.m., 3-3:45 p.m.**

BE SAFE/SEA SEGURO

Orange shirts and hats identify Fermilab staff members. Contact a staff member in case of questions, concerns or emergencies. **Text Fermilab50 to 333-111 for emergency event communication.**

- In case of a safety or medical emergency, call 630-840-3131 or notify a staff member.
- In case of an evacuation, event staff will direct visitors to buses for immediate routing to parking areas.
- In case of structural fire, evacuate the building immediately.
- In case of a lost child, notify a Fermilab staff member.
- In case of severe weather, lightning or thunderstorms, seek shelter in the closest building and not under a tent.
- To stay in compliance with our regulatory agencies' requirements, we post various safety signs, including signs about radioactive material areas, magnetic fields, radio-frequency power and oxygen deficiency hazards.
- All tour areas have been reviewed for safety prior to your visit.
- Supervise children, and avoid standing in roadways.
- Accessibility: ADA restrooms are available throughout the site. Families and individuals with mobility, hearing or visual impairment concerns are invited to notify a Fermilab staff member.

Las camisetas y los sombreros naranja identifican a los miembros del personal de Fermilab. Póngase en contacto con un miembro del personal en caso de preguntas, inquietudes o emergencias. **Envíe por mensaje de texto Fermilab50 al 333-111 para comunicar eventos de emergencia.**

- En caso de una emergencia médica o de seguridad, llame al 630-840-3131 o notifique a un miembro del personal.
- En caso de evacuación, el personal del evento dirigirá a los visitantes a los autobuses para trasladarlos inmediatamente a las áreas de estacionamiento.
- En caso de incendio estructural, evacúe el edificio de inmediato.
- Si se pierde un niño, notifique a un miembro del personal de Fermilab.
- En caso de mal tiempo, relámpagos o tormentas, busque refugio en el edificio más cercano y no debajo de una tienda de campaña.
- Para cumplir con los requisitos de nuestras agencias reguladoras, colocamos varias señales de seguridad, incluso señales sobre áreas de materiales radiactivos, campos magnéticos, energía de radiofrecuencia y peligros de deficiencia de oxígeno.
- Todas las áreas de la excursión han sido revisadas por razones de seguridad antes de su visita.
- Supervise a los niños y evite permanecer de pie en los caminos de acceso.
- Accesibilidad: Los baños para discapacitados (ADA) están disponibles en diferentes ubicaciones en el lugar. Se les solicita a las familias e individuos con problemas de movilidad, audición o discapacidad visual que notifiquen a los miembros del personal de Fermilab.

Come back soon!

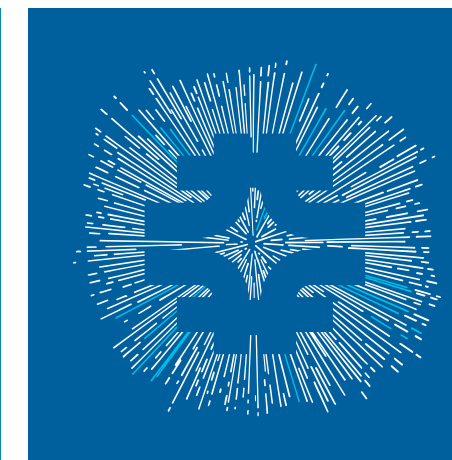
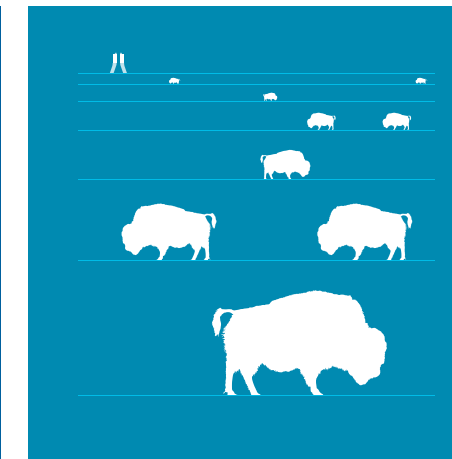
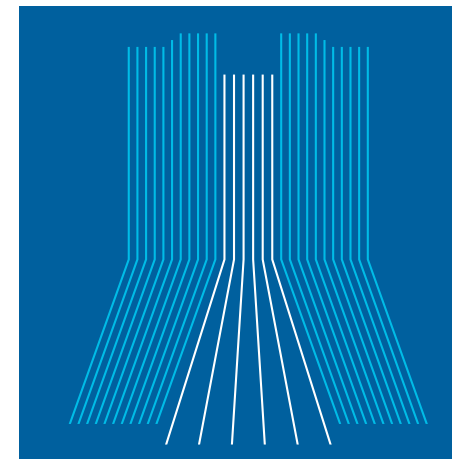
We are open to the public every day from 8 a.m. to 8 p.m. (April through October) and from 8 a.m. to 6 p.m. (November through March). Free, drop-in guided tours take place every Wednesday at 10 a.m.

Visit events.fnal.gov for our year-round activities and learning opportunities for all ages.

Fermilab 50th Anniversary Community Open House

Saturday, September 23, 2017

10 a.m. - 4 p.m.



Welcome to Fermilab

We hope you enjoy exploring behind the scenes at the U.S. Department of Energy's premier particle physics and accelerator laboratory. There's a lot to do, discover and learn. Have a great day!

Bienvenido a Fermilab

Esperamos que disfrute explorando el detrás de escena en el principal laboratorio de física de partículas y acelerador de partículas del Departamento de Energía de los EE. UU. Hay mucho para hacer, descubrir y aprender. ¡Que tenga un gran día!

TOURS AND ACTIVITIES

TECHNICAL CAMPUS HUB

Technical Campus

In Industrial Building 3, see giant magnets and learn how superconducting cables are manufactured. In the Industrial Center Building, learn about the LCLS-II project, our accelerator magnet and cavity test facilities, and the materials science behind these cutting-edge advances.

Bison Viewing Area

See our bison herd and meet Fermilab's bison expert.

Chicagoland STEM Fair

Engage with science through interactive exhibits and demonstrations from Chicagoland's STEM community, including colleges, universities, science organizations, museums and businesses. The fair is located at IARC.

IARC Heavy Assembly Building

The Illinois Accelerator Research Center (IARC) develops new industrial accelerators and applications. In the Heavy Assembly Building you'll find a small electron accelerator and the Mu2e experiment's large superconducting magnet test facility.

WILSON HALL HUB

Wilson Hall Atrium

Tour Remote Operations Center East, the control room for the CMS experiment at CERN's Large Hadron Collider in Switzerland. See Remote Operations Center West, the control room for our many neutrino experiments.

Learn about how Fermilab provides innovative computing solutions and services to support scientific discovery.

Meet representatives from the U.S. Department of Energy.

Wilson Hall Second Floor

Visit the Fermilab Art Gallery to view the artwork of Angela Gonzales, Fermilab's first artist.

Wilson Hall 15th Floor

Take a tour of the 15th floor, and get a bird's-eye view of the Fermilab site. The Wilson Hall 15th-floor tour is a free, ticketed event. Visitors may pick up their tickets in the Wilson Hall atrium. Tickets are first-come, first-served.

Linear Accelerator Gallery and Main Control Room

The Linear Accelerator Gallery, located west of Wilson Hall, is the beginning of Fermilab's accelerator chain. In the Main Control Room, accelerator operators work 24 hours a day to keep the lab's particle beams running at close to the speed of light.

ABOUT FERMILAB

The Department of Energy's Fermilab is America's premier laboratory for particle physics and accelerator research. Together with 4,500 scientists from 50 countries, we aim to discover what the universe is made of and how it works. We study the smallest building blocks of matter and probe the farthest reaches of the universe using some of the largest and most complex particle accelerators, detectors and computing systems in the world. Fermilab is managed by Fermi Research Alliance LLC for the U.S. Department of Energy Office of Science. FRA is a partnership of the University of Chicago and Universities Research Association Inc.

MORE TOURS AND ACTIVITIES

GREEN BUS ROUTE: Ecology & Education

- Prairie Trails**
Prairie grasses, wildflowers and monarch butterflies are some of the things you can experience while touring a short loop around our unpaved interpretive prairie trails.
- Lederman Science Education Center**
Our education programs serve 50,000 K-12 students every year at our lab and in the classroom. Children and families visiting the Lederman Science Center will engage in a variety of hands-on physics and nature activities both inside the building and on the grounds of the center.

ORANGE BUS ROUTE: Technologies

- Cryomodule Test Facility**
The 36-foot-long state-of-the-art superconducting devices tested in this building are destined to be part of the most advanced X-ray laser facility in the world now under construction in California. The prototype for a cutting-edge superconducting proton accelerator planned to be built at Fermilab is also located here.
- Fermilab Accelerator Science and Technology Facility**
Industry, medicine, homeland security, science: More than 30,000 particle accelerators are in operation around the world. In this facility we are building and testing the best of the best. The particle accelerator in this building propels electrons to 99 percent of the speed of light at an energy equivalent to 300 million volts.
- Bubble Chamber and SiDet**
Take a photo of one of Fermilab's first—and most visually striking—particle detectors, a 15-foot bubble chamber. Learn about state-of-the-art particle detectors and cleanrooms.

BLUE BUS ROUTE: Experiments

- Muon g-2 Experiment**
Come see the 50-foot-diameter electromagnet that arrived from Brookhaven National Laboratory in 2013. This magnetic racetrack traps subatomic particles called muons traveling at nearly the speed of light in a quest for the telltale signs of new particles and forces of nature.
- Muon Delivery Ring**
Take a walk through an accelerator tunnel and see the Muon Delivery Ring and beamline for the Muon g-2 and Mu2e experiments. See accelerator magnets and instrumentation, and learn how particle accelerators work.
- Mu2e Building**
Learn more about Fermilab's next muon experiment that will search for hidden subatomic forces. The tour will feature a look around the brand-new, labyrinthine Mu2e building, an introduction to the experiment, and a display of common detector technologies used to perform experiments here at Fermilab.
- Neutrino Experiments**
See our newest neutrino detector, ICARUS, which arrived from CERN this summer and which will join two other detectors in the laboratory's Short-Baseline Neutrino Program. Discover why we are building an even larger, 70,000-ton neutrino detector a mile underground in South Dakota for the Deep Underground Neutrino Experiment. Take a virtual visit of the underground neutrino cavern at Fermilab.

How to navigate our Community Open House

- First, take an orientation tour on a **Red Route** bus. Pick and choose what you want to see and do. End your tour at one of the hubs.
- Explore the hubs and take shuttles to attractions across the site. Allow 30 minutes for bus transportation.

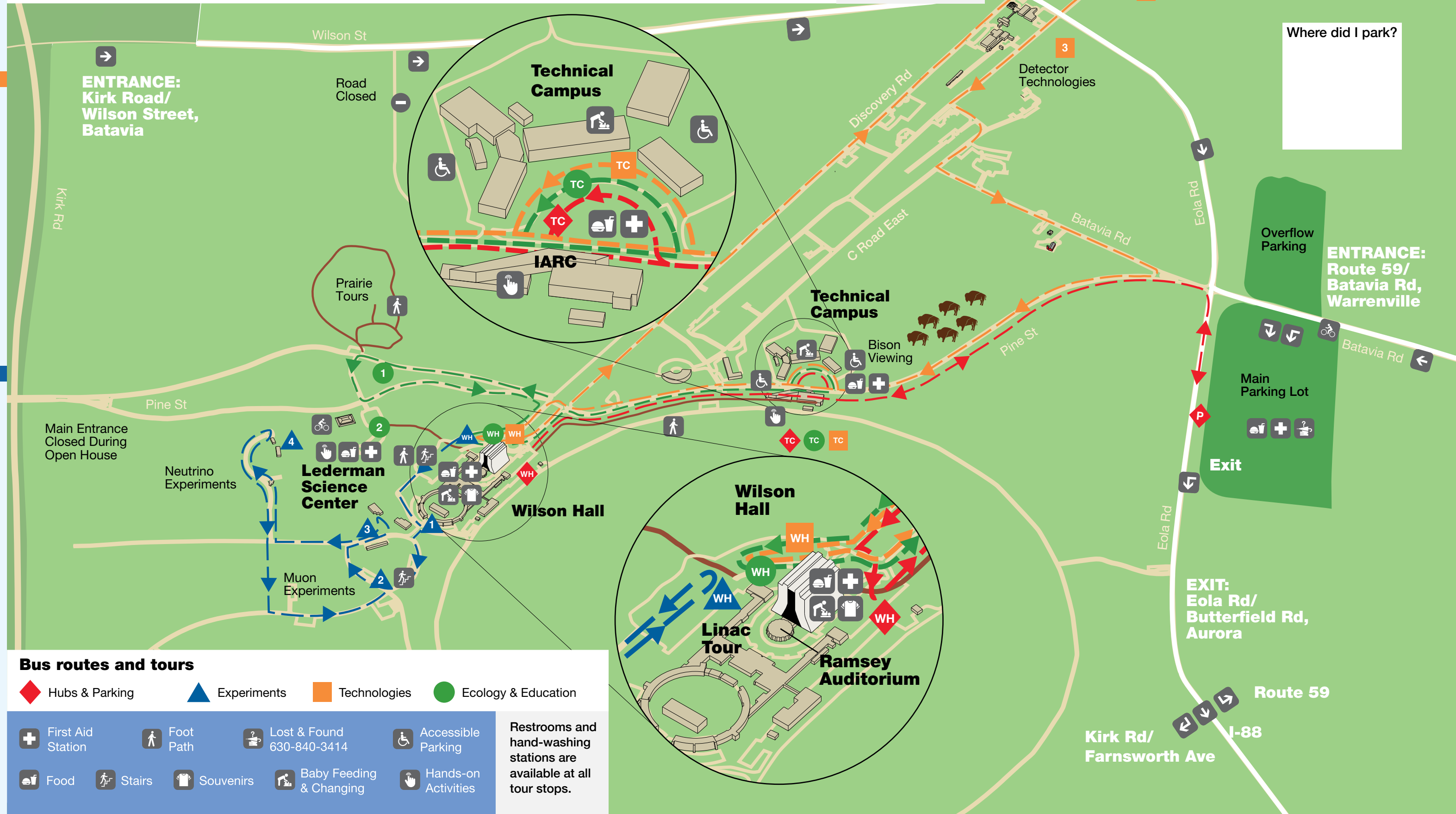
Wilson Hall Hub - Bus routes ♦ ● ■ ▲
This is the 16-story building.
Red diamond, green circle, orange square, blue triangle

Technical Campus Hub - Bus routes ♦ ● ■
This is the area with the spiral sculpture.
Red diamond, green circle, orange square

Food and beverage services provided by:
RED FROG EVENTS
TWO BROTHERS COFFEE ROASTERS



Where did I park?



Bus routes and tours

♦ Hubs & Parking ▲ Experiments ■ Technologies ● Ecology & Education

+ First Aid Station 👤 Foot Path 📄 Lost & Found 630-840-3414 ♿ Accessible Parking
 🍽️ Food 🪜 Stairs 🛍️ Souvenirs 🍼 Baby Feeding & Changing 🖐️ Hands-on Activities

Restrooms and hand-washing stations are available at all tour stops.