Frequently Asked Field Trip Questions

Where is LIGO Hanford Observatory?

LIGO is located 15 miles northwest of Richland, WA on the edge of the Hanford site. Check our Web site (next panel) for maps and directions.

What happens on a LIGO field trip?

A virtual tour of the Milky Way, a 20-min movie about LIGO, hands-on time with exhibits and activites, Q&A with a LIGO scientist, a walking tour of the facility and a visit to the detector control room. Schools are welcome to bring sack lunches and eat at the Observatory.

What is the length of a field trip visit?

Field trips range from two hours to four hours plus travel, depending on the school's available time.

What is the cost to my school?

LIGO field trips are offered at no charge to schools, courtesy of support from the National Science Foundation.

For what ages/grades is a LIGO field trip appropriate?

LIGO has hosted groups that range from preschool through university level. The Observatory offers customized visit experiences that match the needs and interests of all ages.

How do I schedule a field trip to LIGO?

Choose a field trip date that works for your school and contact LIGO using the information on the following page. If the date is clear on LIGO's calendar, you're on your way. Check "Teachers' Corner" on the LIGO Hanford Web site to find classroom resources and activities in advance of the visit.

Contact LIGO

- www.ligo-wa.caltech.edu
- outreach@ligo-wa.caltech.edu
- 509-372-8248 or 509-372-8265

From students . . .

"I had so much fun. The reason why I liked your experiments is that I got to try them myself and they were interesting."

"LIGO is really cool . . . I really liked the tour . I learned so much."

"It is places like LIGO that make me really excited about science . . . We experienced how much fun science can be. "

LIGO also visits schools and classrooms! Check "Teachers' Corner" at the LIGO Hanford Web site (above) to view the full menu of the Observatory's on-site and off-site outreach programs.

LIGO is operated by the California Institute of Technology and the Massachussets Institute of Technology for the National Science Foundation

Explore the worldwide LIGO Scientific Collaboration at www.ligo.org

LSC

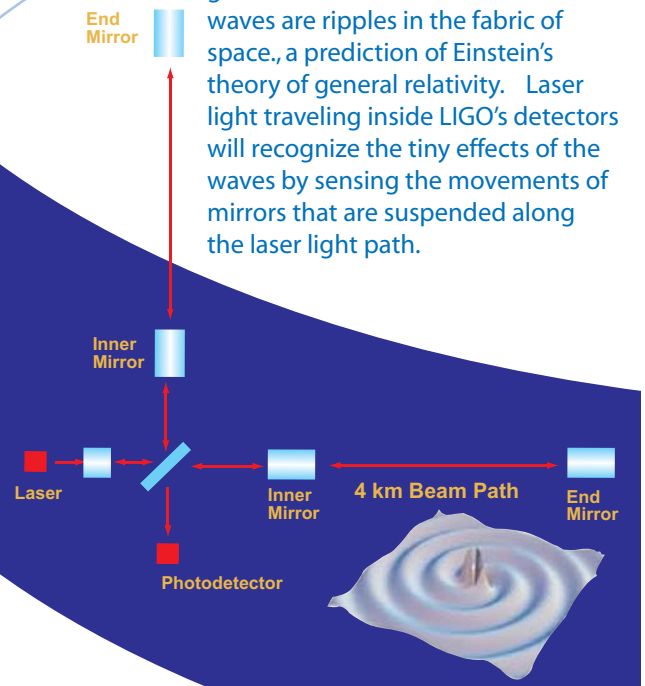
Explore the Excitement of Science Research

Field Trips to LIGO Hanford Observatory

Laser Interferometer Gravitational-wave Observatory

LIGO's enormous detectors will capture whispers from the birth of black holes . . .

. . . and other remarkable events in outer space that produce gravitational waves. Gravitational waves are ripples in the fabric of space., a prediction of Einstein's theory of general relativity. Laser light traveling inside LIGO's detectors will recognize the tiny effects of the waves by sensing the movements of mirrors that are suspended along the laser light path.



Gravitational waves are vibrations of the fabric of empty space

A LIGO field trip offers students a view of the world's most sensitive measurement technology.

A Pendulum Snake, a set of Colored Shadows and a Giant Slinky are only a few of the hands-on exhibits at LIGO. Exhibit-based experiences with wave behavior and gravity help focus students on the big ideas of LIGO's research.

LIGO field trip exhibits and activities are aligned to state and national science standards, providing teachers with a variety of connections to classroom instruction.

Interactive exhibits bring LIGO's physics and astronomy concepts to life

LIGO provides the "LIGO Explorer" packet to each student for inquiry-flavored guidance through the Observatory's set of exhibits and field trip activities.

At LIGO, students will interact with scientists and engineers whose careers are built on scientific inquiry. The Observatory provides a window into a professional science facility.

LIGO employees possess a variety of backgrounds and degrees in STEM professions, offering students personal accounts of college and career pathways.

LIGO gives students a unique real-time view of science research in action

LIGO field trips vary in size from 15 to 150 students and serve all grades from preschool onward.