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Student Journalists Witness the Excitement of the Large Hadron Collider

The world anticipates incredible discoveries when the Large Hadron Collider, the most powerful particle accelerator ever built, starts running later this year at the CERN laboratory in Geneva, Switzerland. As scientists and journalists around the globe gear up for the big event, six teams of American high school students will travel to CERN April 2-7 and report back to their peers across the country via blogs and videos.

The 18 student journalists will witness the same excitement as the professional news media that have flocked to CERN in recent months, including the New York Times, National Geographic and the Discovery Channel. The six teams from five states across the U.S. were the winners of a competition sponsored and funded by the U.S. Department of Energy's Office of Science and the National Science Foundation. Each team consists of a teacher and three students who combine their expertise in physics, communications and video production.

The LHC is a particle accelerator seven times more powerful than anything previously built. The accelerator, a circular machine 27 kilometers in circumference, is located 100 meters underground and spans the border between Switzerland and France. More than 1,300 scientists from 94 universities and national laboratories across the United States participate in the design, construction and operation of the LHC accelerator and experiments.

The LHC experiments will search for new discoveries in the head-on collisions of protons with extraordinarily high energy. These collisions, which will happen 40 million times a second, will recreate the conditions present at the birth of the universe. Physicists from the United States and around the world will use the data from these collisions to learn about the basic forces that have shaped our universe and that will determine its fate. Among the mysteries scientists hope to solve are the origin of mass, the existence of extra dimensions of space and microscopic black holes, and the composition of dark matter. Most exciting will be the completely unknown surprises – new processes and particles that would transform our understanding of energy and matter.

The teams will report on their interviews with physicists and the public, tours of the gigantic particle detectors and the LHC accelerator, and their cultural experiences.

Professional news and information staff in Switzerland will provide training for the students, who will have access to video recording and editing equipment at CERN.

The LHC project is an achievement in international cooperation as well as scientific collaboration. Approximately 10,000 people from almost 60 countries, including students from high school to graduate school, have contributed to the construction of the gigantic machine and its four experiments.

Education is a major component of LHC physicists' efforts. The excitement of the LHC and particle physics inspires young people to study and appreciate science. These students will eventually use their skills in many fields including science, education, industry, finance, and public policy.

For more information on the LHC project, visit CERN's LHC Web pages (<http://public.web.cern.ch/public/en/LHC/LHC-en.html>) and the US LHC Web site (<http://www.uslhq.us>). Information on the ATLAS and CMS Experiments is at <http://atlas.ch> and <http://cms.cern.ch>.

U.S. participation in the LHC project is supported by the Department of Energy's Office of Science and the National Science Foundation.

Participants:

Florida

Lincoln High School, Tallahassee, FL
Teacher: Adam LaMee

Minnesota

Centennial Senior High School, Minneapolis, MN
Teacher: Jon Anderson

New York

Rush-Henrietta Senior High School, Rochester, NY
Teacher: Jeffrey Paradis

Texas

J. Frank Dobie High School, Houston, TX
Teacher: Susan Fontanilla

South Houston High School, South Houston, TX
Teacher: Jim Preston

Utah

Payson High School, Payson, UT
Teacher: Linda Walters