West High Team first in the United States to win International Physics Contest Students selected as winners of CERN's Beamline for Schools Program

Geneva, Switzerland: A team of eight West High School students and two teacher coaches were selected as one of the two annual winners of CERN's Beamline for Schools Competition. The competition is hosted by CERN, the particle physics research center in Geneva, Switzerland. The West High team was picked from 178 teams from 49 countries worldwide. West High students will be the first team from United States selected as winners in the entire history of the competition. There have been ten winners selected since the program's inception in 2014.

Ben Jones, the Assistant Principal at West stated: "This is the first time an American student team has won this prestigious competition, and we are proud of the program at West High School which brought these great kids together to win the prize. It's a major academic accomplishment for Utah and for America."

The team had to make both a written and video proposal of an experiment to conduct on a beamline which contains high energy subatomic particles. Because the CERN beamline is undergoing maintenance for the next two years, this year's beamline experiments will be in Hamburg, Germany at the DESY particle accelerator center. CERN is fully funding the experiment, including a trip for the students and coaches for two weeks in October 2019.

Their experiment was advised by University of Utah professors Charlie Jui and Pearl Sandick. "We're really proud of our West students," said Jui. "They worked hard and it shows in the recognition they've received. I'm really stoked about their win!" The team will be measuring detector efficiency using both matter and antimatter. A link to their video proposal is here: https://www.youtube.com/watch?v=sdexfXt2o30

Teacher and Coach Enrique Arce-Larreta said: "This will be the opportunity of a lifetime for these students in their STEM careers. The project will expose students to international collaboration in science. We have already started working with two scientific mentors, one German and one Portuguese. In addition, we have also started a collaboration with the other winning team from the Netherlands. We will share the same space and beam time during our experiments, and will thus be collecting data for them and vice-versa."

Student Sam Bonkowsky, an eleventh grader at West said: "I'm incredibly excited by this opportunity to go to DESY afforded by winning the Beamline for Schools competition, because it is truly an unparalleled chance both to carry out our experiment in a world-class synchrotron, and to engage with the international physics community"

Beamline for Schools is an Education Outreach project funded by the CERN & Society Foundation and supported by individual donors, foundations and companies. For 2019, the project is partially funded by the Wilhelm and Else Heraeus Foundation; additional contributions have been received from the

Motorola Solutions Foundation, Amgen Switzerland AG and the Ernest Solvay Fund, which is managed by the King Baudouin Foundation.

CERN Official Press Release: <u>https://home.cern/news/press-release/cern/dutch-and-us-students-win-2019-cern-beamline-schools-competition</u>

About CERN: CERN research facilities include the Large Hadron Collider which smashes particles together in the search for the smallest elementary particles in the universe. Scientists discovered the Higgs Boson in 2012 by colliding protons at high energy. Particle physics research at CERN is responsible for the advent of medical imaging, cancer therapy, and the world wide web (in order to store all the data).

About Beamline for Schools: Promo video: https://www.youtube.com/watch?v=87Nkz_-JI-A

West High team See attached for Team photo, taken by Kara Budge, West High Librarian