



Black Hole Science: A Live Classroom Event

November 21, 2019 - 1:00PM EST | 10:00AM PST

More information: <http://bit.ly/BlackHoleScience>

The Black Hole PIRE project is partnering with Zoom.us to offer a live course taught by two scientists and members of the Event Horizon Telescope (EHT), the global collaboration behind the first-ever black hole image announced in April 2019. This course will be provided free of charge to classrooms (grades 8-12) around the country. This presentation will introduce the EHT, explain the motivation for taking an image of a black hole, and highlight the technological and algorithmic advances required to obtain the image. This will be offered on November 21, 2019. Additional information and registration link will be available by October 1.

In addition to the live course, the EHT scientists will also provide four corresponding lesson plans and activities that focus on teaching Kepler's laws, developing intuition for gravitation and planetary orbits, and data analysis. These complete lessons plans are completely optional but suggested for classroom instruction the three days prior to the live talk (i.e. Monday-Wednesday). The fourth lesson plan provides the opportunity for students to apply what they have learned. This will be a hands-on group project where students will use real astronomical data to measure the mass of the black hole at the center of our galaxy. Multiple completion formats from pencil and paper to computer based data analysis will be offered.

This teaching module will aim to address the Next Generation Science Standards, for example HS-ESS1-4 Earth's Place in the Universe. All material will be geared towards grades 8-12, and is completely free. The live talk will be self-contained and will not require completion of the accompanying optional lesson plans.

The Black Hole PIRE is funded by the National Science Foundation (Award #1743747). The teaching module and live course are offered as a public service in order to develop a unique opportunity for students to engage and experience one aspect of extraordinary science that is happening now.

Questions may be directed to Rosie Johnson, Black Hole PIRE Project Manager, University of Arizona: rosiejohnson@email.arizona.edu

