



U.S. HOUSE OF REPRESENTATIVES COMMITTEE ON
SCIENCE, SPACE, & TECHNOLOGY

Opening Statement

Chairwoman Eddie Bernice Johnson (D-TX)

Full Committee Hearing:
Event Horizon Telescope: The Black Hole Seen Round the World
May 16, 2019

Good morning and welcome to today's hearing.

Welcome to our witnesses. I am eager to hear more about this exciting breakthrough. Not long ago, scientists were not sure black holes were real. Even Einstein had his doubts. Scientists have since uncovered evidence of black holes, but they had no way to capture an image until the Event Horizon Telescope.

In science, most knowledge is gained incrementally. From efforts to peer into the far reaches of the universe, to experiments conducted at the smallest scale, our collective understanding of the world around us is built piece by piece. Each hard-earned discovery brings reality into better focus. Every once in a while, a discovery will jolt us forward. Such breakthroughs generate entirely new avenues and tools for scientific study, and a new appreciation for what we can achieve. The black hole image captured by the Event Horizon Telescope is both a jolt and the culmination of decades of incremental advances, most of which were made possible by the National Science Foundation.

The dark shadow bounded by a ring of light may look simple enough, but don't be fooled. The first-ever image of a black hole is a groundbreaking advancement in science, setting the stage for a new era of black hole astronomy. This new Earth-sized telescope also opens up a new window for the observation of other astronomical objects and may further our understanding of gravity and the evolution of galaxies.

An enormous amount of effort went into clearing the necessary technological, logistical, political, and scientific hurdles. While there was never a guarantee that this project would succeed, the National Science Foundation invested in a good idea with potentially enormous payoff. This achievement demonstrates that when the Federal government invests in our nation's

best and brightest, and in the facilities necessary to do cutting-edge science – and importantly, remains committed to those investments - we are limited only by our imaginations. I congratulate each of our witnesses and the entire Event Horizon Telescope team on this astonishing achievement.

Another important part of this story is the international partnership. This discovery would not have been possible without contributions from partners around the world, including from Spain, Chile, Mexico, Europe, Taiwan, China, South Korea and Japan. At a time of rising global tensions, let this be a reminder that the pursuit of science is still a unifying force.

Perhaps the most lasting impact of this discovery will be the inspiration for students to pursue STEM studies. The excitement of this discovery has no doubt instilled a hunger that will drive the next generation of scientists to make discoveries of their own.

Today we celebrate your success. I look forward to learning more about this incredible image, the global team that made it possible, and future plans for the Event Horizon Telescope.