## **OPENING STATEMENT Ranking Member Eddie Bernice Johnson (D-TX)**

House Committee on Science, Space, and Technology Subcommittee on Space Subcommittee on Research and Technology "Astronomy, Astrophysics, and Astrobiology" July 12, 2016

Thank you Chairman Babin and Chairwoman Comstock for holding this hearing, and thank you to the esteemed panel of witnesses for being here this morning.

Astronomy, astrophysics, and astrobiology are scientific fields that inspire young and old alikethose who have experienced the beauty of the night sky with their naked eye alone; those who have peered through the world's most powerful telescopes; those who have no formal STEM training, and those who have dedicated their lives to studying the deepest questions of the universe. Indeed, the questions that inspire the pursuit of astronomy, astrophysics, and astrobiology– what are the origins of the universe, what is dark matter, are we alone – captivate us all.

The United States has long been a leader in astronomy and astrophysics. Through our Federal agencies -- NASA, the National Science Foundation (NSF), and the Department of Energy (DOE) – and their university, non-profit, and private sector partners, we have led the development and construction of many of the world's most important astronomical facilities, including the Hubble Space Telescope, LIGO, and ALMA.

As we all know, these facilities can be extraordinarily expensive, in some cases costing billions of dollars over the full life cycle of design, construction, deployment, and operations. We have made a collective decision as a nation that these investments are worthwhile. Hearings like this one serve as an important opportunity to remind us of why we've stood by that decision, and to ensure that the investments we are currently making remain on track.

In the Science, Space, and Technology Committee, we have a unique perspective and responsibility because of our role in overseeing the three main agencies whose missions include support for astronomy, astrophysics, and astrobiology. These fields are somewhat unique in the federal research portfolio in terms of all of the collaboration and coordination that occurs across three separate dimensions: between the community of users and the agencies, among the agencies themselves, and between our government and our international partners.

In this hearing, we will have the opportunity to discuss astronomy and astrophysics across all three of those dimensions. We will hear about some of the opportunities and challenges, as well as the current state of horizon planning, including planning for the computational power and integrated databases that will maximize the scientific value of the vast streams of data yet to come.

By all accounts, NASA, NSF, and DOE are doing a remarkable job with all of this in a tough budget environment, and I want to commend them for that. However, we also know that at a time

in which facilities are becoming more and more expensive to build and operate, agencies are struggling to fund the researchers themselves. Proposal success rates are dropping, and promising early career astronomers are deciding to pursue other career paths. Astronomers are so well trained that they are highly sought-after in many other fields of research and sectors of our economy. That is something to celebrate. However, we must be careful not to chase the most promising early career astronomers out of a field they love because we fail to provide the funding to support their important work. It is in the interest of our nation that we maintain a vibrant scientific enterprise across all fields of science and engineering – to satisfy human curiosity and advance knowledge, to lead in innovation, and to continually strengthen our economic, environmental, and national security.