



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

Opening Statement

Chairman Don Beyer (D-VA)
of the Subcommittee on Space and Aeronautics

Joint Hearing of
Space & Aeronautics and Research & Technology Subcommittees:
A Review of the Decadal Survey for Astronomy and Astrophysics in the 2020s

December 1, 2021

Good morning, and welcome to today's hearing on *A Review of the Decadal Survey for Astronomy and Astrophysics in the 2020s*. I also want to welcome our esteemed panel of witnesses. We are so pleased you are joining us today.

This is a joint hearing of the Subcommittee on Space and Aeronautics and the Subcommittee on Research and Technology. The National Aeronautics and Space Administration and the National Science Foundation jointly lead this nation's astronomy and astrophysics programs, one from space, and one from the ground, so it only makes sense that we would jointly conduct this hearing. I want to thank Chairwoman Haley Stevens for her collaboration on this joint hearing.

"We live in a time of extraordinary discovery and progress in astronomy and astrophysics." That is the opening to the Decadal Survey, and a recognition that a fascinating future is on our horizon--one that could lead us to understanding the interconnections within the cosmic ecosystem across diverse structures ranging from the tenuous gases at the boundaries of galaxies, to the interior of stars, to planetary systems.

Our nation's investments in astronomy and astrophysics research and development have led to profound breakthroughs. Examples of discoveries over the past decade include:

- The first detection of gravitational radiation from astronomical sources;
- The discovery of thousands of planets beyond our solar system or "exoplanets"; and
- Precision measurements of the Milky Way's supermassive black hole.

The Universe and the astronomical phenomena comprising it are vast. The questions of study are virtually infinite. That is why the National Academies' once a decade surveys are so important. They focus the community's recommendations for scientific inquiry and prioritize the means of pursuing them, as well as the necessary investments required. I'm delighted that both co-chairs of the National Academies astronomy and astrophysics decadal survey are here to discuss the report's important findings and recommendations.

Their work in developing a scientific consensus is essential to our ability to support the nation's astronomy and astrophysics programs in our role as authorizers. It's the decadal survey that guides us as we seek to ensure the health and vibrancy of the discipline, the balance of programs that constitute agency activities, and the vision of those who study, investigate, and theorize on some of the most profound questions of our time. In that regard, I'm pleased that this decadal survey examines the status of the profession. Expanding access to and diversity and inclusion of the astronomy and astrophysics community is a key to achieving the ambitious goals that this decadal survey lays out.

The Subcommittee on Space and Aeronautics that I chair involves the space-based aspect of the decadal survey, and the National Aeronautics and Space Administration's role in it. NASA is on the cusp of realizing a major decadal priority with the upcoming launch of the James Webb Space Telescope, an observatory that has been over two decades in the making. The Nancy Grace Roman Telescope, also a decadal priority, is making significant progress as well. I am interested to hear what the decadal committee has learned from NASA's history of large-scale observatories, and its recommended new approach to flagship missions with the Great Observatories Missions and Technology Maturation Program.

While both space and ground-based activities are essential to realizing the decadal survey's recommendations, transformational science and the goals of understanding dark energy, dark matter, and potentially habitable worlds don't recognize a space or ground-based division. With that in mind, I'm looking forward to hearing from our witnesses on what the report recommends to reduce those divisions and to facilitate the synergies of cross-agency activities.

In closing, I want to thank the community of astronomers and astrophysicists who contributed to the decadal survey, and the National Academies steering committee and panels whose hard work, including through the pandemic, brings us this important report. Your efforts are not only guiding the future of the discipline, they are also inspiring the next generation, many of whom will become our STEM leaders through the gateway of exploring our Universe and the science of astronomy and astrophysics.