Title: A Scientific Revolution: the Hubble and James Webb Space Telescopes

Abstract: Astronomy is going through a scientific revolution, responding to a flood of data from the Hubble Space Telescope, other space missions, and large telescopes on the ground. In this talk, I will discuss some of the most important astronomical discoveries of the last 10 years, and the role that space telescopes have played in those discoveries. The next decade looks equally bright with the newly refurbished Hubble and the promise of its successor, the James Webb Space Telescope. I will describe how Hubble was upgraded and how and why we are building Webb.

Bio:
Dr. Jonathan Gardner is the Chief of the Observational Cosmology Laboratory and the Deputy Senior Project Scientist for the James Webb Space Telescope at NASA's Goddard Space Flight Center. He leads a group that studies the Universe as a whole, from its dramatic beginnings in the Big Bang, to the mysterious dark energy that will determine its future. The James Webb Space Telescope is the successor to the Hubble Space Telescope which will look backwards in time to find the first galaxies that formed after the Big Bang, to trace their evolution into galaxies like our own Milky Way, and to connect the formation of stars and planets with our own Solar System.