The James Webb Space Telescope Mission

Dr. Matthew A. Greenhouse
James Webb Space Telescope Program, NASA Goddard Space Flight Center

The James Webb Space Telescope is the scientific successor to the Hubble Space Telescope. It is a cryogenic infrared space observatory with a 25 m² aperture telescope that will extend humanities’ high angular resolution view of the universe into the infrared spectrum to reveal early epochs of the universe that the Hubble cannot see. The Webb’s science instrument payload includes four cryogenic near-infrared sensors that provide imagery, coronagraphy, and spectroscopy over the near- and mid-infrared spectrum. The JWST is being developed by NASA, in partnership with the European and Canadian Space Agencies, as a general user facility with science observations to be proposed by the international astronomical community in a manner similar to the Hubble. The Webb’s technology development and mission design are complete. Construction, integration and verification testing is underway in all areas of the program. The JWST is on schedule for launch during 2018.