

Statement in support of the James Webb Space Telescope

A statement in support of the James Webb Space Telescope from the ~60 delegates of the "Young and Bright: understanding high-redshift structures" meeting, to be held at the Leibniz Institute for Astrophysics, Potsdam September 12-16, 2011

Observational astronomy has provided humanity with a unique perspective of our place in the Universe. The recent groundbreaking achievements of observatories including the Hubble Space Telescope and Spitzer Space Telescope have provided tantalizing glimpses of the first galaxies that formed less than a billion years after the Big Bang. The dazzling images from these space telescopes have captured the attention and excited the imagination of millions around the world.

Exploring the early universe presents a unique challenge for astronomical observations. The starlight from the first galaxies arrives at earth as infrared radiation, while the extreme distances involved render ordinary galaxies nearly invisible, both to Hubble and large telescopes on the ground. The next steps along the path of discovery must therefore be taken with an infrared, space-based telescope with unprecedented sensitivity. The James Webb Space Telescope will have this unique capability, providing an essential tool for exploring the assembly of galaxies in the early universe and extending the achievements of observatories like the HST in the future. JWST will allow us to probe the epoch when the structures of the modern universe first emerged. The success of JWST is therefore vital to revealing the primitive origins of galaxies, including that of our own, the Milky Way.

The delegates of this meeting extend a strong and whole-hearted support for the JWST. We are greatly disappointed by the current effort to cancel JWST, which would have an enormous negative impact on the fields of Astronomy and Astrophysics. We sincerely hope that the JWST will go ahead as planned, ushering in a new age of astronomical discoveries.

Approved unanimously, 29 August 2011