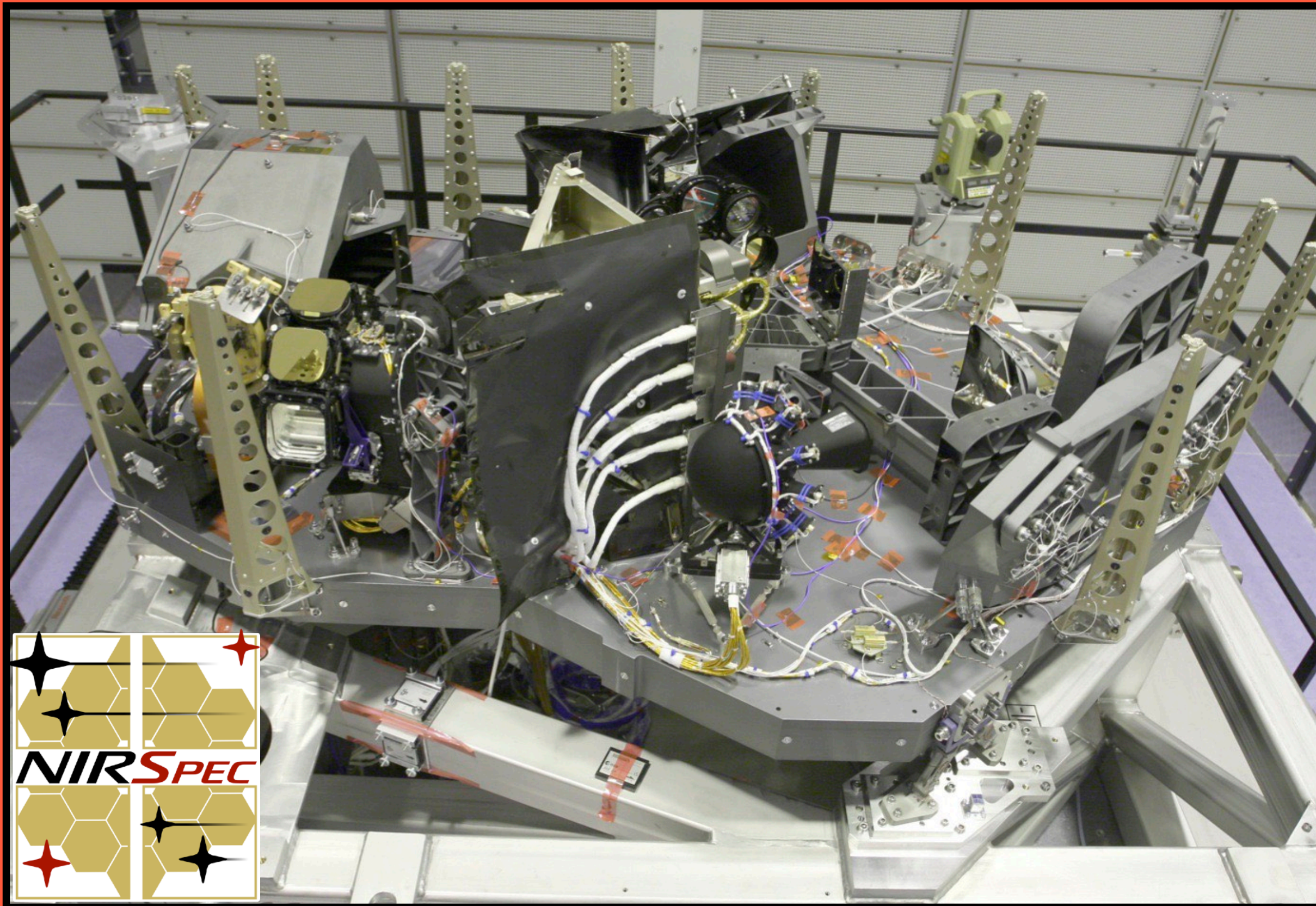


NIRSpec: The near-infrared spectrograph aboard the JWST



Credit: Airbus Defence and Space

Assembled flight NIRSpec model (without cover) at the end of its integration at Airbus.

NIRSpec is a near-infrared spectrograph developed by the European Space Agency (ESA) that will join other three science instruments aboard the James Webb Space Telescope (JWST).

Designed to study light from 0.6 to 5.4 μm , NIRSpec will be the first instrument in space with a multi-object capability, allowing to obtain spectra of more than 100 objects simultaneously. In addition, it is equipped with an integral field spectroscopic unit to study extended objects and it features five fixed slits for long-slit spectroscopic observations.

Among a wide range of science topics, NIRSpec will study the first luminous objects in the Universe, the assembly of galaxies through cosmic time, the nuclear regions of nearby galaxies and the atmospheres of exoplanets.

Scientists at CAB have been participating in the development of the instrument from its inception and currently work in the preparation of the first scientific programs that will be carried out with NIRSpec once the JWST is launched in 2021.