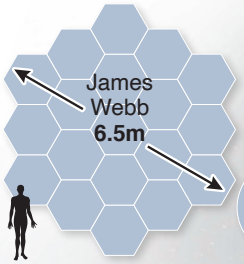
Roman Telescope to reveal hidden universe

NASA's cutting-edge *Nancy Grace Roman Space Telescope*, a $4 billion observatory, is set to unravel some of the universe's biggest mysteries including dark energy, dark matter and distant worlds

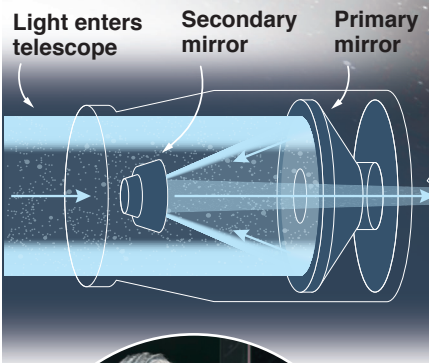
Primary mirror

Roman's mirror is 2.4 metres in diameter – same as ***Hubble Space Telescope's*** primary mirror, but only one-fourth the weight



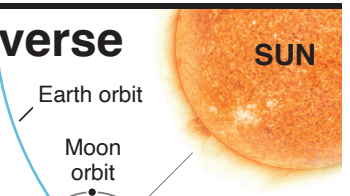


James Webb Space Telescope captures detailed views of space, while Roman surveys much wider areas, helping identify targets for Webb to study in greater detail

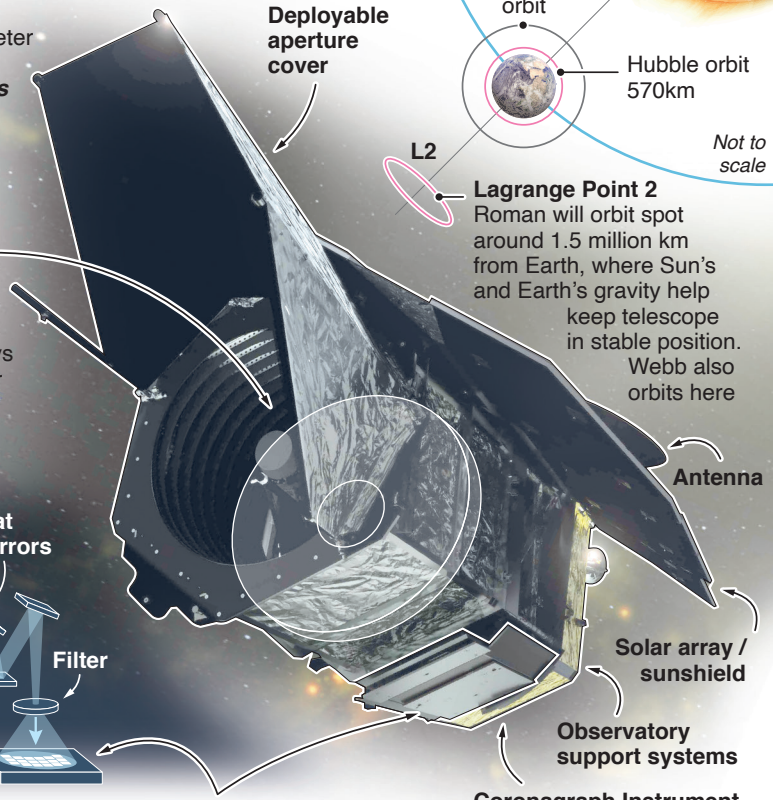




Telescope named after ***Dr Nancy Grace Roman*** *(above)* – NASA's first chief astronomer, nicknamed "Mother of Hubble" as she was key to making telescope a reality



Lagrange Point 2
Roman will orbit spot around 1.5 million km from Earth, where Sun's and Earth's gravity help keep telescope in stable position. Webb also orbits here



Wide Field Instrument (WFI)

Holds 300-megapixel near-infrared camera with 18 detectors designed to survey vast chunks of sky



Roman Field of view

Roman can observe 100 times more sky in one image than one standard image from Hubble, capturing thousands of galaxies and tens of millions of stars at once

Coronagraph Instrument technology demonstration *(Opposite side of telescope):* Performs high contrast imaging and spectroscopy of individual nearby exoplanets

Source: NASA

Pictures: NASA/GSFC/SVS, NASA/ESA

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