

NASA probe set to visit Jupiter's Trojan asteroids

L'Ralph allows scientists to interpret data NASA's Ralph – a space instrument that has travelled as far as Pluto – is set to explore Jupiter's Trojan asteroids, which are remnants from the early days of the solar system. Ralph was first launched aboard the New Horizons spacecraft in 2006 and obtained stunning flyby images of Jupiter and its moons.

This was followed by a visit to Pluto where Ralph took the first high-definition pictures of the iconic minor planet.

In 2021, Ralph is set to journey with the Lucy mission to Jupiter's Trojan asteroids.

The instrument will fly by another Kuiper Belt object called 2014 MU69 – nicknamed Ultima Thule – in January 2019. Ralph's observations of 2014 MU69 will provide unique insights into this small, icy world.

The Lucy spacecraft carries a near-twin of Ralph, called L'Ralph, which will investigate Jupiter's Trojan asteroids.

The L'Ralph instrument suite will study this diverse group of bodies; Lucy will fly by six Trojans and one Main Belt asteroid – more than any other previous asteroid mission. L'Ralph will detect the Trojan asteroids' chemical fingerprints.

L'Ralph allows scientists to interpret data provided by the Sun's reflected light that are the fingerprints of different elements and compounds.

These data could provide clues about how organic molecules form in primitive bodies, a process that might also have led to the emergence of life on Earth.

Source: xaam.in