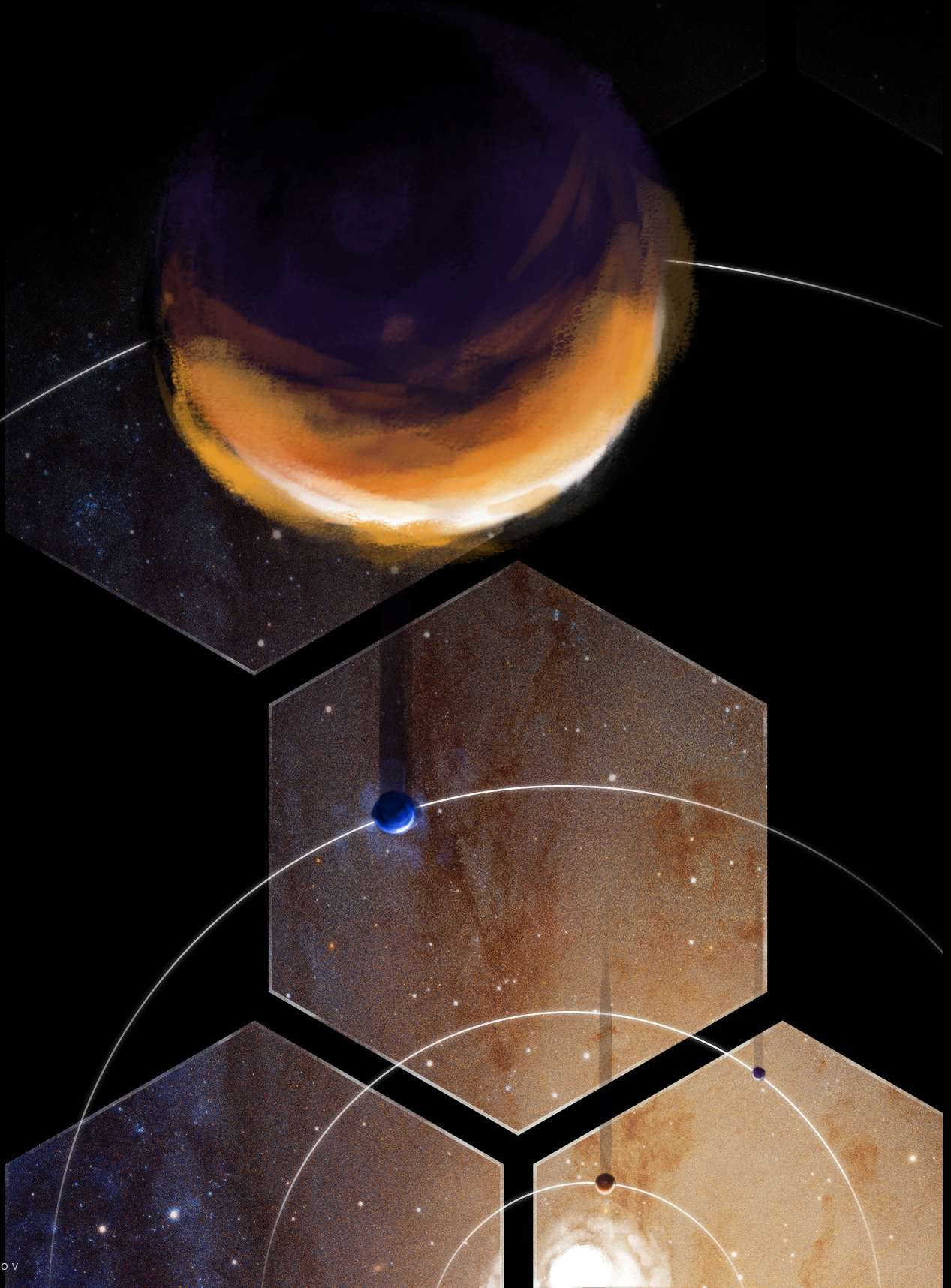
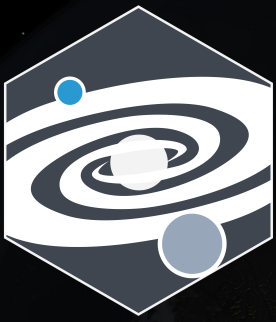




L U V O I R





L U V O I R

Large UV/Optical/Infrared Surveyor Exoplanets

<http://asd.gsfc.nasa.gov/luvor>

LUV O I R is a concept for a highly capable, guest observer-driven space observatory with tens to thousands of times the science grasp of HST. **LUV O I R** would enable transformative breakthroughs in Exoplanet science by combining a large aperture, broad wavelength coverage, ultra-stable mirrors, and a long lifetime with powerful instruments.

ECLIPS: Near-UV to near-IR coronagraph with imaging spectroscopy

LUMOS: Far-UV to optical multi-object spectrograph and imager

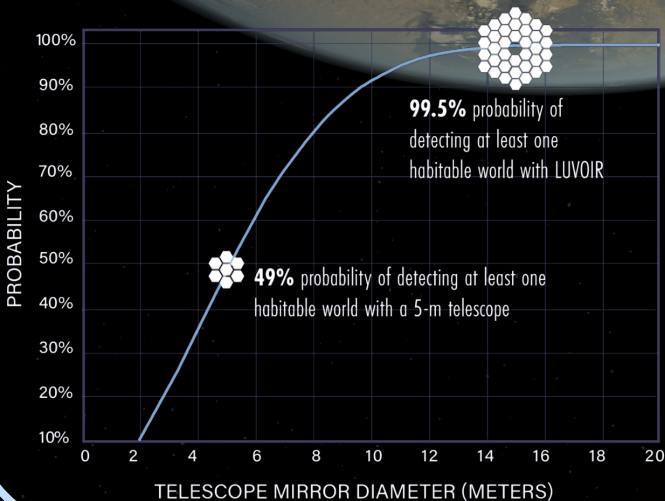
HDI: Near-UV to near-IR high resolution wide-field camera

POLLUX: Far-UV to near-UV spectropolarimeter (European instrument)

Comparative Astrobiology

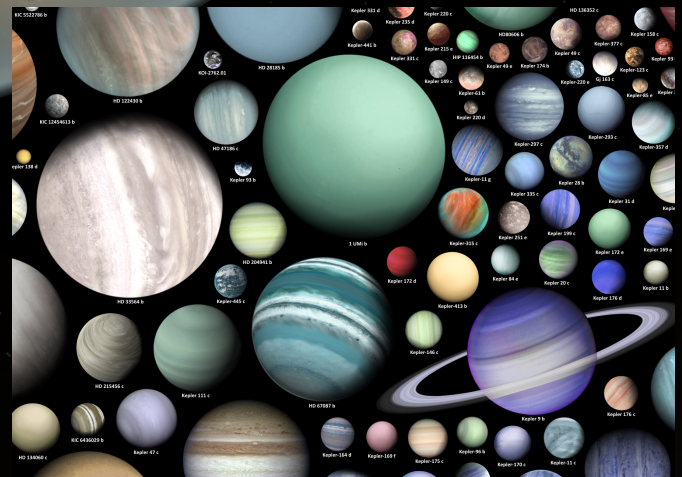
LUV O I R will detect & spectrally characterize dozens of potentially habitable planets around F, G, K, and M stars. This will include a statistical survey for signs of habitability and life on these worlds.

MUCH GREATER PROBABILITY OF FINDING A HABITABLE PLANET



Planet Diversity

LUV O I R will detect & spectrally characterize hundreds of exoplanets, exhibiting a wide range of properties. This dataset will lead to dramatic advancements in our understanding of how planets work.



M. Vargic