



Mission Summary

Last Update: 01 Aug 2008

EUCLID Mapping the geometry of the dark Universe	
Theme	How did the Universe originate and what is it made of?
Primary Goal	To map the geometry of the dark Universe
Targets	Galaxies and clusters of galaxies out to $z \sim 2$, in an all-sky survey covering 20 000 deg ²
Wavelength	Visible and near-infrared
Telescope	1.2 m
Orbit	L2
Lifetime	5 years (TBC)
Partners	To be confirmed
Type	M-class mission

Status of the mission

In response to the first Call for Missions for the Cosmic Visions plan, two dark energy related missions were proposed: the dark universe explorer (DUNE) and the spectroscopic all-sky cosmology explorer (SPACE). The two concepts have been merged and a mission that combines weak gravitational lensing and baryonic acoustic oscillations measurements is currently being studied. Up to end of May 2008, a quick feasibility study is carried-out by ESA leading to a very preliminary design for the mission and its payload. This preliminary design is then used by industry for a more thorough assessment lasting about a year. The report of this assessment study will be presented to the scientific community in late 2009.