

**Proponente:** Giuseppe Longo (longo@na.infn.it) (In collaboration with OAC-INAF)

**Titolo:** “Photometric redshifts for the Euclid space mission”

**Descrizione:** Photometric redshifts are crucial to many fields of cosmology, from the determination of dark matter distribution through weak lensing, to the measurement of cosmological parameters, to the evaluation of some cosmological observables. The Euclid mission, which will be launched in 2019, is the most important cosmological experiment for the next decade and more than 1000 astronomers and physicists from all over the world are involved in its preparation. Its main goal is to map the Dark matter and Dark Energy distribution with an unprecedented accuracy. The Napoli group has the lead for the study of photometric redshifts with machine learning methods. The student will work on the test of these methods on simulated data and will actively participate to the preparatory work for the Euclid space mission.