

Título/Title:

Galaxy satellites in the Hubble Ultra Deep Field

Orientador/Supervisor:

Fernando Buitrago (IA-Lisboa) fbuitrago@oal.ul.pt

Descrição/Description:

Before the arrival of the James Webb Space Telescope (Spring 2019), the Hubble Ultra Deep Field is still the deepest and best resolution of the Universe we can work on. Recently, we have studied the few very massive galaxies in this image, and by subtracting our galaxy models to the real data, we have identified a population of previously missed objects. It is still unknown whether these targets are dwarf galaxies at large redshift, very high redshift galaxies or even proto-globular clusters. Why don't you try to solve this enigma? The present project aims to characterizing these objects with Hubble Space Telescope photometry, obtaining their colors and ascertaining their likely origin, with a possible extension for deconfusing their spectra in state-of-the-art 3D spectroscopy data.