Título/Title:

A structural investigation of blue compact dwarf galaxies

Orientador/Supervisor:

Polychronis Papaderos (IA-Porto) papaderos@astro.up.pt

Descrição/Description:

Blue compact dwarf (BCD) galaxies are the best nearby analogs of the first low-mass galaxies that formed in the early Universe. These gas-rich, chemically unevolved systems undergo recurrent bursts of star formation that give rise to intense ionized gas emission and supernovae-driven galactic winds extending out to several kpc away from the starburst component.

The goal of this project is to analyze the photometric structure of a sample of ten nearby BCDs using surface photometry and profile decomposition techniques. Additionally, radial color profiles will be computed and used to estimate the starburst age and place constraints on the evolutionary status of the underlying host galaxy.