

Título/Title:

Starburst activity and extended ionized gas emission in blue compact galaxies

Orientadores/Supervisors:

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Descrição/Description:

Blue compact galaxies (BCGs) are the best nearby analogues of the first galaxies that rapidly formed out of chemically pristine gas in the early Universe. These galaxies undergo vigorous star formation activity over a spatial extent of ~ 1 kpc, producing thousands of luminous massive stars in a brief (~ 5 Myr) starburst episode. The release of a prodigious amount of energy and momentum from stellar winds and supernovae results in a large-scale ionization and acceleration of gas in BCGs, and starburst-driven gas outflows ("galactic winds") with velocities of several 100 km/s.

The goal of this project is to study ionized gas outflows in BCGs with high-quality narrow-band images of the hydrogen Balmer H-alpha line.