

Star-forming clumps in galaxies of the GASP survey.

La formazione stellare nelle galassie della survey GASP.

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Star formation in galaxies takes place in star-forming clumps, usually in the disk of galaxies. Recently, star-forming clumps have also been observed far from galaxy disks, in the tails of so-called “jellyfish galaxies” which are galaxies whose gas is being stripped by the hydrodynamical effects of the hot and dense gas that permeates galaxy clusters.

The student will analyze the characteristics of star-forming clumps, both in jellyfish galaxies and in normal galaxies from the GASP survey. During the thesis work, he/she will have the opportunity to investigate the ages, stellar masses and sizes of such clumps, study the nature of the clumps and their future fate (will they become globular clusters? UltraCompact Dwarfs? Dwarf Spheroidals?) and compare them with clumps in high redshift galaxies. The student will exploit the full multi-wavelength dataset of the GASP survey, starting with MUSE integral-field spectroscopy, and including other acquired and proposed datasets (ALMA, HST etc).