lines. We show how these results are useful to interpret recent spectroscopic results of distant $z \sim 2-3$ star forming galaxies.

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PHOTOMETRY AND DYNAMICS OF THE MINOR MERGER AM 1219-430 WITH GEMINI GMOS-S

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This work is based on r' and g' images and long-slit spectra obtained with the GMOS at the Gemini South Telescope. We detected a tidal tail in the main galaxy (AM 1219A) and a bridge of material connecting the galaxies. The surface brightness profile of AM 1219A was decomposed into bulge and disc components. The profile shows a light excess of $\sim$ 53% due to the contribution of star-forming regions. On the other hand, the surface brightness profile of the secondary galaxy shows a lens structure in addition to the bulge and disc. The rotation curve of AM 1219A is quite asymmetric, suggesting a gas perturbed by interaction. The overall best-fitting solution for the mass distribution of AM 1219A was found with M/L for bulge and disc of $\Upsilon_b = 2.8^{+0.4}_{-0.4}$ and $\Upsilon_d = 2.4^{+0.3}_{-0.2}$, respectively, and a NFW profile of $M_{200} = 2.0^{+0.5}_{-0.4} \times 10^{12}\, M_\odot$ and $c = 16.0^{+1.2}_{-1.1}$.

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PHYSICAL PROPERTIES OF GALAXIES IN THE SLOAN DIGITAL SKY SURVEY DETECTED IN INFRARED

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The extragalactic astrophysics is experiencing a golden age with the availability of an almost inconceivable amount of observational data and projects in different spectral regions. Our research group at UFSC, in collaboration with other researchers from Brazil and France, was successful in following these new challenges, especially with the spectroscopic analysis of the SDSS data. The result of this effort was to build a database of physical properties of galaxies to nearly 1 million objects, which is completely public. Recently we also started analyzing data from the GALEX ultraviolet, spectral broadening our coverage. In this work, we continue this expansion, focusing our attention in the infrared region of the electromagnetic spectrum with the inclusion of font catalogs obtained a recently mission, the WISE project. We increase our database with the data obtained from the WISE and made the match in the catalog of creating a subsample of SDSS galaxies about 300 000 objects. These objects are analyzed using a new computational tools in order to identify the properties in the infrared. This is done in conjunction with the Department of Computer Science of Santa Catarina Federal Institute. In the first analysis, we obtain a clear separation between star forming galaxies (SF) and "retired" galaxies (RT). In this work, we present the latest results of the analysis of this data.

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STAR FORMATION RATES OF DS GALAXIES

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The Star Formation Rate of a sample of nine dwarf spiral galaxies and ten late-type Sm is determined from the Hα luminosity. The main interest was to check if these two kind of late-type galaxies have similar SFR or not. The images were acquired at the 1.5m telescope of the SPM-OAN and they were reduced with the software MIDAS. The values of the SFR are very similar for both type of galaxies and also similar to other Sm galaxies. The main result is that the dwarf spiral galaxies are more efficient when forming stars than the Sm galaxies because the SFR