

CALIFA spectral analysis: simulations and aperture effects.

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Abstract

The Calar Alto Large Integral Field Area Survey (CALIFA) is a recently started survey with the main aims at observing a statistically well-defined sample of ~ 600 galaxies in the local universe with the PMAS/PPAK integral field spectrophotometer on the 3.5 m telescope at the CAHA. The main goal of this survey is to characterize the spatially resolved spectroscopic properties (both the stellar and ionized gas components) of all the population of galaxies at the current cosmological time, in order to understand in detail the how is the final product of the evolution of galaxies. To guarantee the final science product of the CALIFA survey, exploratory pilot studies aimed to test the observing program, the data reduction and the quality of the final data were carried out. Here we present a first spectroscopic analysis of these pilot studies. In addition, we use the advantages of 2D spectroscopy to explore the aperture effects when comparing in the diagnostic diagrams for their classification.