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# ABSTRACT ONLY

## OBSERVATIONAL EVIDENCE OF STOCHASTIC PROCESSES IN STAR FORMATION

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It is generally accepted that there exist a proportionality between a galaxy's star formation rate (SFR) and its total luminosity in UV and emission line spectra. Despite this, there is evidence in theoretical studies that under special conditions there exist certain stochastic processes that can break this proportionality, stating that stochasticity can produce a significant distribution of the total luminosity and equivalent width (EW) at a certain SFR, while the effects become less relevant as SFR increases. In this work, we analyze data from both data releases of the Calar Alto Legacy Integral Field Area Survey (CALIFA) using a gaussian fit to reproduce strong emission lines and a direct estimation of parameters for weak emission lines in order to contrast the observational data with the theoretical predictions of EW.

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