

Galaxy Zoo: Star Formation Histories in the COSMOS Survey

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ABSTRACT

Key words: keyword1 – keyword2 – keyword3

1 INTRODUCTION

2 METHODS

Starry from becky’s paper [Smethurst et al. \(2015\)](#). Becky’s group environment paper [Smethurst et al. \(2017\)](#). UltraVista catalogue paper [Muzzin et al. \(2013\)](#)

3 DATA

3.1 Multi-wavelength data

This study is based on a K_s -selected catalog of the COSMOS/UltraVISTA field from [Muzzin et al. \(2013\)](#). The catalog contains PSF-matched photometry in 30 photometric bands covering the wavelength range $0.15\mu\text{m} \rightarrow 24\mu\text{m}$ and includes the available *GALEX* ([Martin et al. 2005](#)), CFHT/Subaru ([Capak et al. 2007](#)), UltraVISTA ([McCracken et al. 2012](#)), S-COSMOS ([Sanders et al. 2007](#)), and zCOSMOS ([Lilly et al. 2009](#)) datasets.

4 MODEL

$$\text{SFR}(t) = \begin{cases} \text{SFR}_0(t_q) & t \leq t_q \\ \text{SFR}_0(t_q) \exp\left[-\frac{(t-t_q)}{\tau}\right] & t > t_q \end{cases} \quad (1)$$

5 PROBABILISTIC FITTING

$$P(\theta_k) = \begin{cases} 1 & 0 \leq t_q \text{ [Gyr]} \leq 13.8 \text{ and } 0 \leq \tau \text{ [Gyr]} \leq 4 \\ 0 & \text{otherwise} \end{cases} \quad (2)$$

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6 CONCLUSIONS

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