

# long title

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## ABSTRACT

blabla

**Key words:** galaxies: evolution – galaxies: statistics – galaxies: stellar content – galaxies : active.

## 1 INTRODUCTION

## 2 PROBLEM

**Outline of this section:** We do not have the true redshift for each galaxy! We have to deal with  $p(z, T)$  instead of collapsing it on  $T$ . Why?

## REFERENCES

Abazajian K. N., et al., 2009, ApJS, 182, 543

## APPENDIX A: APP 1

## 3 SYNTHETIC LIBRARY

**Outline of this section:** Tell how we did our synthetic library. MCMC to randomly select 2000 spectra for each template of BPZ, etc and so on...

## 4 SIMULATIONS

**We can generate fake data from i.e. SDSS spectroscopy and try to recover the properties of the galaxies. Another way to do is to compare with a simulated light-cone like the one of Merson et al 2013.**

## 5 COMPARISON WITH REAL DATA

**Which data will we compare our results to??**

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Parameters list and description			
Parameter	Units	min/max values	Meaning
$t_0^Y$	yr	$6 \times 10^6$ to $6.3 \times 10^9$	Age of the younger burst
$\theta^Y$	-	0.001 to 100	$\theta = \tau \times t_0$ . Where $\tau$ is burst e-folding time
$t_0^O$	yr	$10^9$ to $1.76 \times 10^{10}$	Age of the older burst
$\tau^O$	-	0.001 to 100	$\theta = \tau \times t_0$ . Where $\tau$ is burst e-folding time
$Z$	$[FeH]$	0.0004 to 0.05	Stellar metallicity
$\theta_V$	-	0 to 0.2	Extinction. See ? for details.
$f^Y$	%	0 to 100	Light fraction on the younger component

**Table 1.** Synthetic templates library parameters