# Are the most metal-poor DLAs affected by quenching post-reionization?

# Louise A. Welsh,<sup>1★</sup> Ryan Cooke<sup>1</sup> and Michele Fumagalli<sup>2,1,3</sup>

<sup>1</sup>Centre for Extragalactic Astronomy, Durham University, South Road, Durham DH1 3LE, UK

Accepted XXX. Received YYY; in original form ZZZ

#### **ABSTRACT**

Previous investigations have shown that the metal-poor DLA found towards J0035–0918 may experience a hiatus in star formation following the epoch of reionisation. In this work we investigate whether this star formation history is common amongst the metal-poor DLA population. We also introduce a increasing sophisticated model, that assumes that these metal-poor systems experience two bursts of star formation; first, a burst of Population III star formation followed by a burst of Population II star formation.

**Key words:** keyword1 – keyword2 – keyword3

## 1 INTRODUCTION

This project is still in the very early stages therefore little has been written yet!!

#### 2 METHODS, OBSERVATIONS, SIMULATIONS ETC.

In progress...

#### 3 CONCLUSIONS

Hopefully this will be a publishable work soon enough.

## ACKNOWLEDGEMENTS

During this work, R. J. C. was supported by a Royal Society University Research Fellowship. We acknowledge support from STFC (ST/L00075X/1, ST/P000541/1). This project has received funding from the European Research Council (ERC) under the European Union's Horizon 2020 research and innovation programme (grant agreement No 757535). This work used the DiRAC Data Centric system at Durham University, operated by the Institute for Computational Cosmology on behalf of the STFC DiRAC HPC Facility (www.dirac.ac.uk). This equipment was funded by BIS National E-infrastructure capital grant ST/K00042X/1, STFC capital grant ST/H008519/1, and STFC DiRAC Operations grant





Figure 1. When there is no science to show, there is always a cute animal!!

ST/K003267/1 and Durham University. DiRAC is part of the National E-Infrastructure. This research has made use of NASA's Astrophysics Data System.

<sup>&</sup>lt;sup>2</sup>Dipartimento di Fisica G. Occhialini, Università degli Studi di Milano Bicocca, Piazza della Scienza 3, 20126 Milano, Italy

<sup>&</sup>lt;sup>3</sup>Institute for Computational Cosmology, Durham University, South Road, Durham DH1 3LE, UK

# 2 L. A. Welsh et al.

#### REFERENCES

 $Author\ A.\ N.,\ 2013,\ Journal\ of\ Improbable\ Astronomy,\ 1,\ 1\\Others\ S.,\ 2012,\ Journal\ of\ Interesting\ Stuff,\ 17,\ 198$ 

# APPENDIX A: SOME EXTRA MATERIAL

If you want to present additional material which would interrupt the flow of the main paper, it can be placed in an Appendix which appears after the list of references.

This paper has been typeset from a  $\ensuremath{\text{TEX/LATEX}}$  file prepared by the author.