MNRAS Lagrangian $\mathbb{E}_{\mathcal{E}}$ template – title goes here

Keith T. Smith, 1* A. N. Other, 2 Third Author 2,3 and Fourth Author 3 Royal Astronomical Society, Burlington House, Piccadilly, London W1J 0BQ, UK

- ²Department, Institution, Street Address, City Postal Code, Country
- ³ Another Department, Different Institution, Street Address, City Postal Code, Country

Accepted XXX. Received YYY; in original form ZZZ

This is a simple template for authors to write new MNRAS papers. The abstract should briefly describe the aims, methods, and main results of the paper. It should be a single paragraph not more than 250 words (200 words for Letters). No references should appear in the abstract.

Key words: keyword1 – keyword2 – keyword3

INTRODUCTION

Efforts to reduce the uncertainty in the estimate the Hubble constant are single-method?.

The emcee affine invariant MCMC ensemble sampler ? has been widely used due to its usability and efficiency. Markov Chain Monte Carlo (MCMC) samplers such as ? have been widely used for fitting data to models. Recently,? used emcee for model assessment using Bayesian and Akaike Information Criteria along with Bayes factors, focusing on small datasets, where it is not relevant to reproduce the original variance of the data. It has also been proved to be useful in recovering probabilistic models for photometric redshifts $\ref{eq:constraints}$.

Determining whether a galaxy belongs to a group by analyzing their common properties?

This is a simple template for authors to write new MN-RAS papers. See mnras_sample.tex for a more complex example, and mnras_guide.tex for a full user guide.

All papers should start with an Introduction section, which sets the work in context, cites relevant earlier studies in the field by ?, and describes the problem the authors aim to solve (e.g.?).

METHODS, OBSERVATIONS, SIMULATIONS ETC.

Normally the next section describes the techniques the authors used. It is frequently split into subsections, such as Section 2.1 below.

Table 1. This is an example table. Captions appear above each table. Remember to define the quantities, symbols and units used.

-				
	A	В	$^{\rm C}$	D
	1	2	3	4
	2	4	6	8
	3	5	7	9

2.1 Maths

Simple mathematics can be inserted into the flow of the text e.g. $2 \times 3 = 6$ or $v = 220 \,\mathrm{km \, s^{-1}}$, but more complicated expressions should be entered as a numbered equation:

$$x = \frac{-b \pm \sqrt{b^2 - 4ac}}{2a}.\tag{1}$$

Refer back to them as e.g. equation (1).

Figures and tables

Figures and tables should be placed at logical positions in the text. Don't worry about the exact layout, which will be handled by the publishers.

Figures are referred to as e.g. Fig. 1, and tables as e.g. Table 1.

CONCLUSIONS

The last numbered section should briefly summarise what has been done, and describe the final conclusions which the authors draw from their work.

^{*} E-mail: mn@ras.org.uk (KTS)

2 K. T. Smith et al.

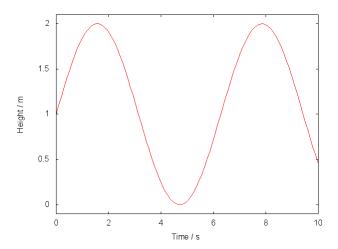


Figure 1. This is an example figure. Captions appear below each figure. Give enough detail for the reader to understand what they're looking at, but leave detailed discussion to the main body of the text.

ACKNOWLEDGEMENTS

The Acknowledgements section is not numbered. Here you can thank helpful colleagues, acknowledge funding agencies, telescopes and facilities used etc. Try to keep it short.

REFERENCES

Dhawan S., Jha S. W., Leibundgut B., 2018, ASTRONOMY & ASTROPHYSICS, 609

Kourkchi E., Tully R. B., 2017, ASTROPHYSICAL JOURNAL, $843\,$

Speagle J. S., Eisenstein D. J., 2017a, MONTHLY NOTICES OF THE ROYAL ASTRONOMICAL SOCIETY, 469, 1186

Speagle J. S., Eisenstein D. J., 2017b, MONTHLY NOTICES OF THE ROYAL ASTRONOMICAL SOCIETY, 469, 1205

Zhang J., Shields M. D., 2018, MECHANICAL SYSTEMS AND SIGNAL PROCESSING, 98, 465

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 TeX/IMTeX file prepared by the author.