A Sample Report

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Abstract

This sample file is suitable for use with Microsoft Word or Apple Pages. It conforms reasonably close to the original template, which was set in LaTeX.

1 Introduction

Here is an example of the body text. Citations are done in author-date format, for example, Paxton et al. (2011, 2013) describes the MESA stellar evolution code. Alternatively, we could write that our research uses the MESA stellar evolution code (Paxton et al. 2011, 2013).

1.1 Subsection

Styles are provided for section, subsection, and subsubsection headings. The body text is double-spaced, which allows room for marking comments.

Here is a new paragraph. Text is justified; that is, the inter-word spacing is adjusted to make text fit smoothly within margins.

1.1.1 Subsubsection

We are now in a subsubsection. Displayed equations should be centered, with an equation label placed at the right in parentheses. Punctuate the equation as if it were part of the sentence. For example, the equation of hydrostatic balance,

(1)

where *P* is the pressure, *g* the local gravitational acceleration, and ρ the mass density, describes the structure of a self-gravitating object. Notice that we don’t end a paragraph on an equation, and we don’t indent the line following an equation.

2 Figures

Figures should be vector graphics, such as PDF, rather than bitmap images such as PNG or JPG. Figure 1, below illustrates the use of a caption.The figure width should be 0.7 of the text width; that is, the figure width should be 4.55 in for a square or landscape figure.

Figure 1. Here is a figure of a random plot. Well, it is actually a comparison of the 3α reaction rate as evaluated by Caughlan & Fowler (1988) and by NACRE (Angulo et al. 1999). The thick gray line denotes the rate from the Caughlan & Fower (1988) observation the thin dished line.

3 Code displayed in the text

To display code in the text, we put it in a monospace font with the code line numbers in the margint: for example, when modeling an accreting neutron star with MESA, the composition of the accreted material is set in the controls namelist as follows.

1. accrete\_same\_as\_surface = .false.
2. accrete\_given\_mass\_fractions = .true.
3. num\_accretion\_species = 2
4. accretion\_species\_xa(1) = 0.5
5. accretion\_species\_id(1) = ’c12’
6. accretion\_species\_xa(2) = 0.5
7. accretion\_species\_id(2) = ’pd106’

References

Angulo, C., et al. 1999, Nuclear Physics A, 656, 3
Caughlan, G. R., & Fowler, W. A. 1988, At. Data Nucl. Data Tables, 40, 283
Paxton, B., Bildsten, L., Dotter, A., Herwig, F., Lesaffre, P., & Timmes, F. 2011, ApJS, 192, 3

Paxton, B., et al. 2013, ApJS, 208, 4