WRITING ANNUAL REPORTS WITH LaTeX

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This text is an example that you can use as a template for your own annual report. It just introduces briefly the main features of the nsclannual class.

1   INTRODUCTION

The nsclannual class is based on the regular article class. Title and authors are entered using the \title and \author commands. The \maketitle command prints the title and author names. The text of the report can be divided in sections and subsections, both of which will be numbered. Subsubsections are usually not used in the annual report. If used, they will just get an unnumbered run-in heading. Figures can be included with the \includegraphics command, the needed package is already available by using the nsclannual class. An example is given below, see Fig. 1.

More information on LaTeX can be found in the literature [1, 2].

2   SPECIAL FEATURES

Besides the special layout of the annual report, this class also contains some useful extra options.

2.1   Typing nuclear isotopes   The \nuc{}{} command provides an elegant way to set nuclear isotopes, where the first argument takes the mass number, and the second argument takes the letter-abbreviation of the element. The mass number will be set as a superscript in the matching font, like in ^{11}Li, **or ^{8}B**, *or even ^{19}C*.

2.2   Creating author notes   The notes that contain specific information for the authors are added at the end of the report using the authornotes environment. The matching key has to be provided following the author's name with the \anote{} command. Please check the source file of this text for the correct use of this feature.

3   MATHEMATIC EQUATIONS

This section provides some examples of the use of mathematic equations. Please note that the nsclannual class supports $\mathcal{AMS}$TeX.

Equations can occur as in-line formulas like $E = mc^2$, or they can be set in separate lines and numbered:

$$-\frac{dE}{ds} = \frac{4\pi Z_{\mathrm{p}}^2}{m_e v^2}\left(\frac{e^2}{4\pi\varepsilon_0}\right)^2 Z_{\mathrm{t}} N_{\mathrm{t}} L \tag{1}$$

or unnumbered

$$L = \ln\frac{2m_e v^2}{I} - \ln(1 - \beta^2) - \beta^2 \ .$$

Figure 1: This is an example for a figure caption.

The problem with some fonts is that the matching math fonts are not available. This defect can be more or less obvious. Please compare the two following lines:

$$1234567890 \; AaBbCcDdEe$$
$$1234567890 \; AaBbCcDdEe$$

The upper line is set in text-mode, while the lower line uses math-mode.

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References

1. T. Oetiker, H. Partl, I. Hyna, and E. Schlegel, *The Not So Short Introduction to LaTeX 2ε*, available at CTAN ftp archives: <ctan.tug.org> (US), <ftp.dante.de> (Germany), <ftp.tex.ac.uk> (UK).
2. M. Goossens, F. Mittelbach, and A. Samarin, *The LaTeX Companion*, Addison-Wesley Pub Co, 1994