# Introduction to "A short example of how to use LaTeX for scientific reports"

## Stephen J Eglen

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| Email | S.J.Eglen@damtp.cam.ac.uk |
| Website | http://www.damtp.cam.ac.uk/user/eglen |
| Address | Department of Applied Mathematics and Theoretical Physics, University of Cambridge, Wilberforce Road, Cambridge CB3 0WA U.K. |

I lecture on a Master's programme that requires the students to write many scientific reports during their course. A typical report needs figures, tables, and bibliography, all of which LaTeX is well-suited for. Most students have heard of LaTeX from their peers or from their lecturers. However, due to the demands of the course, few students take time out specifically to learn how to use LaTeX, especially when deadlines are close. In response to a few suggestions from students, I therefore decided to put on a short lab session introducing the features of LaTeX to new users.

When preparing the lab, I was keen to avoid writing "yet another introduction to LaTeX" as other people have done that already, to good effect (see Section 7 of the intro.tex article for two guides). Instead, I started looking for a brief overview of how to write reports in LaTeX. One close match was the article by Peter Flom ("LaTeX for academics and researchers who (think they) don't need it", The PracTeX Journal, 2005, number 4). However, that article missed some aspects (BibTeX; graphics inclusion) that I knew students would require. Furthermore, I wanted the students to have all the source files available along with the relevant UNIX commands, so that they could easily modify the document. From these requirements, I then wrote the attached document, "A short example of how to use LaTeX for scientific reports".

The practical session was run in a lab where each student sat at a Linux workstation with access to the source files. They were given handouts of both the

source file (intro.tex) and the output (intro.pdf). I gave a short introduction, encouraging students to read the source file and compare it with the output. The students were left to work through the document, editing it and recompiling to see the effects of their changes. I was available to answer questions and students also exchanged helpful comments during the session. One useful suggestion during the session was that students wanted to type in their own minimal yet complete example. I wrote the following short example on the board for them to type in:

```
\documentclass{article}
\begin{document}
Hello world.
\end{document}
```

Students found this simple example to be useful as a way of starting from scratch. By the end of the 90 minute session, most students then felt comfortable with the core ideas behind LaTeX. More long term, I am happy to say that the number of assignments being submitted in LaTeX has increased, and I've heard many comments about how much they like the output from LaTeX, compared to their word processors. I therefore hope to repeat the course in the next academic year using this material. By making this article available, I hope that it might be useful to similar "getting started" classes.