Introducing LaTeX

What is LaTeX?

LaTeX is a document processing language which is particularly good at typesetting mathematics. It enables you to concentrate on *content* while the software takes care of (perfect!) *presentation*.

How do I say it?

It is pronounced 'lay-teck'.

Why should I use it?

- the output looks beautiful
- it is excellent at typesetting math and math formulae... like this:

$$\sum_{i}^{n} i = \frac{(n+1)^{\alpha}}{2} \leq \gamma^{3}(q_i) \neq \frac{\partial e^{\sin\theta}}{\partial x} \quad \forall\, y$$

- it sends a strong signal about you and the quality of your paper: jokers, losers and time-wasters use Microsoft Word. Fact.
- even if you have a girlfriend, it is great fun

Where do I get it?

LaTeX is just a language, like French or Dutch: this set of tutorials will teach you to a proficient level. The key question is *where* to *write* it. In the star lab, you will write LaTeX in a program called WinEdt. This is very user-friendly and easily grasped. Note that this program is not WinEdit: a completely distinct piece of software that has a different pronunciation altogether. You will be ostracized and regarded as mentally deficient if you refer to WinEdt as WinEdit: if you left a piece of fish in the sun, would it *riot*?

Is that it?

No. When you write a document in the LaTeX language in WinEdt, it needs to be 'compiled' for you to see how what you have written will look. The compiler in the star lab is called MiKTeX (pronounced "mick-teck"). You don't need to worry about the technical aspects of how MiKTeX works.

Is *that* it?

Almost! When your document has been compiled, it is ready to view and you need to tell WinEdt to show it to you. There is a separate window—called a previewer—that will make this appear for you. In the star lab, we will be using YAP, which stands for *Y*et *A*nother *P*reviewer. When you are happy with the way your document looks in YAP, you can print it.

What textbooks do I need?

Well, after this course, hopefully none. However, a good guide book, which will cover all of what is taught here is Leslie Lamport's *LaTeX: A Document Preparation System*, 2^{nd} addition, 1994. We have Lamport's book in the star lab. In addition, Antoni Diller's *LaTeX : Line by Line*, 2^{nd} addition, is a nice introduction.