

# Introducing L<sup>A</sup>T<sub>E</sub>X

## What is L<sup>A</sup>T<sub>E</sub>X?

L<sup>A</sup>T<sub>E</sub>X 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?

L<sup>A</sup>T<sub>E</sub>X 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 L<sup>A</sup>T<sub>E</sub>X 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 L<sup>A</sup>T<sub>E</sub>X 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 *Yet Another Previewer*. 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 *L<sup>A</sup>T<sub>E</sub>X: A Document Preparation System*, 2<sup>nd</sup> addition, 1994. We have Lamport's book in the star lab. In addition, Antoni Diller's *L<sup>A</sup>T<sub>E</sub>X : Line by Line*, 2<sup>nd</sup> addition, is a nice introduction.