Title of Paper

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Abstract

One of the most annoying things about LaTeX, and there are a lot, is how hard it is to just start writing math papers. This is an empty template intended to enable one to just start writing a paper. It uses my personal style, but might be useful for other people. It uses BibLatex by default. Search `DELETE` in the file to know which portion to delete when you start writing.

1. Introduction

All the LaTeX definitions/macros/etc are in the `prefix.tex` file. This makes this file a bit cleaner.

Theorem 1.1. *Bla bla.*

Proof: This is the proof.

$$\sqrt{2} + \sqrt{2} = 2\sqrt{2}.$$ ∎

> James: It is extremely useful to leave comments in the text for your coauthors.

> Ford: And the other author might reply...

> James: But one can still have the last word.

See Theorem 1.1.

Lemma 1.2. . *This is a lemma.*

See Lemma 1.2.

Definition 1.3. A number is a ***number***.

See also Definition 1.3.

Remark 1.4. Remarks are useful sometime.

Was Remark 1.4 useful?

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2. Second section

Do not forget to cite some irrelevant papers [Knu10].

3. More stuff

Some math:
$$\mathbb{V}[X] = \mathbb{E}\Big[(X - \mathbb{E}[X])^2\Big].$$

Some definitions.

Definition 3.1. An integer number $p > 1$ is ***prime*** if it is divisible only by 1 or itself.

A theorem:

Theorem 3.2. *The number of primes is unbounded.*

Proof: Assume for the sake of contradiction that the number of primes is finite, say k, and let $1 < p_1 < p_2 < \cdots < p_k$ be these primes. Observe that $N = p_1 \cdot p_2 \cdots p_k + 1 > 1$ is indivisible by $p_1, \ldots, p_k$, and is larger than all these numbers. Thus, N must be prime. A contradiction. ∎

Definition 3.1 and Theorem 3.2 were both known to the Greeks. Well, to some of the Greeks.

I prefer to use `enumitem` for creating lists:

(I) One can create more compact lists.

(II) There is more control over labels.

And another good reason is because:

(III) One can resume the numbering.

It is usually a good idea to let LATEX do its thing. Do not use \\ to end lines (common mistakes for LATEX beginners). End a paragraph by having an empty line. If you want a big space between two paragraphs, just put \bigskip in a line on its own between th two paragraphs.

Just like that.

Paragraphs. I like to title my paragraphs so that people know what the paragraph is about. This is a personal style thing, as area lot of other writing stuff. Follow what you like. More sectioning commands follow. If you comment out the \def\UseBibLatex1 then the system would use bibtex instead.

3.1. A subsection

3.2. A lemma example

Lemma 3.3. *This is a lemma.*

4. Bibliography

Nowadays, I like to use `biblatex`, but it is somewhat more painful to use than `bibtex`. The big advantage of `biblatex` that it is highly configurable if you are willing to spend the energy to learn it. It does much better work than `bibtex`. I highly recommend getting your bibtex entry from DBLP, since they have the `doi` information – this implies that you get a link to the paper in `biblatex` or `bibtex` if you use the right style.

Anyway, here is an example of a citation [Knu10].

Acknowledgments

Thank everyone.

References

[Knu10] D. E. Knuth. *Selected Papers on Design of Algorithms*. Vol. 191. CSLI lecture notes series. Cambridge University Press, 2010.