# A One-Column Latex Template

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Begin abstract here. This will naturally be less wide compared to the rest of the page. You can adjust the space after the abstract, as well as whether or not you print the word "Abstract" in the .tex file.

#### 1. Introduction

Simply start typing here. Starting on a new line in the .tex file doesn't start a new line in the pdf document - rather, you'll need to specifically tell latex you want a new line.

This can be done like this. Notice Latex automatically takes care of the paragraph tabbing. You can also add in equations by saying

$$e^{i\pi} + 1 = 0, (1)$$

and reference them with (1).

#### 2. Mathematical Preliminaries

There are several options into how to structure your paper. For example, sections. The current section we are in, Section 2, is about mathematical preliminaries

## 2.1 Geometry

We can use subsections.

#### §1. Differential Geometry

Finally, we can use "subsubsections" for even more granular levels of detail.

### 3. Compiling the PDF

I use the command line to compile my PDF files. Run

xelatex one-column-paper.tex

to compile the PDF. Every time you modify the refs.bib bibliography file, you will also be prompted to run

### bibtex one-column-paper.aux

to correctly format the bibliography. We include bibtex formatting, rather than the more powerful and user-friendly biber back-end, because Arxiv submissions require a bibtex back-end.

#### 4. Misc

Note that starting from the second page of the paper onwards, pages have a heading at the top of the page. We can cite a paper as long as it in our refs.bib file. An interesting paper on microfluidic fuel cells could be found in [1].

## References

[1] D. Vigolo, T. T. Al-Housseiny, Y. Shen, F. O. Akinlawon, S. T. Al-Housseiny, R. K. Hobson, A. Sahu, K. I. Bedkowski, T. J. DiChristina, and H. A. Stone. Flow dependent performance of microfluidic microbial fuel cells. *Phys. Chem. Chem. Phys.*, 16:12535–12543, 2014.