UNM Nuke LaTeX Templates

Liam Pohlmann¹

1. Nuclear Engineering Department, University of New Mexico, Albuquerque, NM



Welcome to the Wonderful World of LaTeX!

- Content Outline:
 - What is LaTeX, and how does it make my life easier?
 - Getting started
 - Using the templates → walk-through example of a lab report

What is LaTeX?

- Stylized software for typesetting documents
 - It's Word for *real* academics
- Used primarily in the academic and scientific world
- First developed in the 1980s, and has since had a strong following

Is It Right for You?

Pros

- Standardized text formatting across documents
- Excellent equation editing
- Robust handling of cross-referencing and citations
- Automated bibliography and table of contents generation
- Lots of options for formatting, including many packages
- A general feeling of superiority

Cons

- There is a learning curve...
- Takes more effort upfront to get a template made
- Harder to format figures within the text

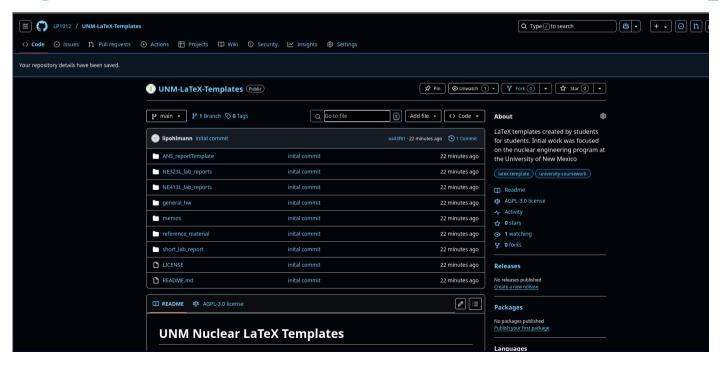
Getting Started

- Need some way to compile
 - Overleaf: https://www.overleaf.com
 - Simply make an account to start. Fremium cloud-based service
 - TeX Live: https://www.tug.org/texlive/
 - More work upfront, but I think it pays off
- Need some way to edit files *easily*
 - Overleaf (editor is already included)
 - PyCharm (with TeXiFy IDEA plugin)
 - VSCode?

- Need some way to manage citations (need BibTeX files!)
 - https://www.zotero.org/
 - Better BibTeX: https://github.com/retorquere/ zotero-better-bibtex
 - Other options such as Mendeley and BibMe work too

Getting the Templates

• Need to pull templates from GitHub: https://github.com/LP1012/UNM-LaTeX-Templates



Walk-Through Example

General Notes

- Organization is incredibly important
 - Have an individual directory per project
 - Use different directories for figures, data, etc.
- Automate as much as possible
- Check for packages that do what you want (the `physics` package is *incredibly* useful for equations)
- Google is your friend.