Abstract

This is a LaTeX template intended for academic theses, and was put together by Jabir Ali Ouassou while preparing his PhD dissertation. The template itself is released under a Creative Commons Attribution licence (CC BY 4.0). This basically means that you are free to use the template for any purpose as long as you give appropriate credit.

The template bundles the Libertinus fonts, which is used for all regular text and mathematics, and the URW classico fonts, which are used for chapter and section headings. The former is available under the Open Font Licence (SIL OFL 1.1), and is free for both private and commercial use. The latter is available under the Aladdin Free Public Licence (AFPL), and is only free for non-commercial use. If commercial use is of importance, a suitable replacement for URW classico would be the Libertinus Sans fonts, which are also bundled with the template.

Note that this template relies on LuaLaTeX for e.g. font customization, and on BibTeX for reference handling. For command-line users, the easiest way to compile the document is to run `latexmk -lualatex thesis.tex`. If using an IDE, please check the program settings for how to enable compilation with LuaLaTeX and BibTeX. The template is based on the KOMA-Script book class (`scrbook`), so for further customization of the template, please check out their documentation.

The template does not include a title page. This is because the style requirements typically varies between universities, and many institutions will anyway autogenerate a titlepage upon thesis submission.

Preface

This would be a natural place to specify what kind of thesis this is, acknowledge your supervisor and coworkers, and so on.

Contents

1 Introduction

Write an introduction to the field here.

2 Example chapter

This chapter serves as a simple demonstration of what the thesis template looks like. It provides some simple examples of typical content in academic theses; see e.g. table 2.1, figure 2.1, and equation (2.2). In addition, it shows what the default chapters, sections, and margins look like. For completeness, we also include some references [1–3].

2.1 Here is an example section

Here is an example of a display equation: a self-consistency equation taken from the study of superconductivity. Note that all equations are left-justified instead of centered. In text with a large number of short display equations, this makes the text easier to follow with your eyes, since they don't have to jump large distances at a time. It also makes the page look more organized due to the constant indentation level.

$$\Delta(z) = \int_0^\infty \mathrm{d}\epsilon \ \mathrm{Re}\big[f_s(\epsilon)\big] \tanh\left(\frac{\pi}{2e^\gamma} \frac{\epsilon/\Delta_0}{T/T_\mathrm{c}}\right) \tag{2.1}$$

Here is another example, in the form of Maxwell's equations. Note the consistent indentation level compared to the equation above.

$$\begin{aligned} \nabla \cdot \mathbf{D} &= \rho, \quad \nabla \times \mathbf{E} = 0 - \partial_t \mathbf{B}; \\ \nabla \cdot \mathbf{B} &= 0, \quad \nabla \times \mathbf{H} = \mathbf{J} + \partial_t \mathbf{D}. \end{aligned} \tag{2.2}$$

Finally, we will show some examples of tables and figures. Note how the width of table 2.1 matches the indentation level of the equations. The captions are formatted using a small font and extra margins, which helps separate the captions from the surrounding text.

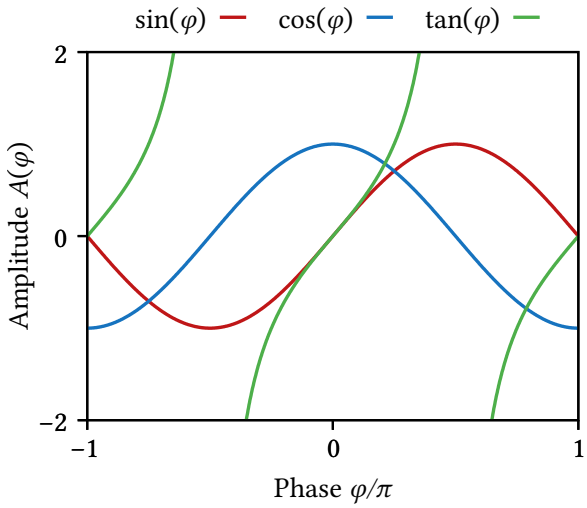

Figure 2.1: This is an example figure made by GNUPLOT. I have also included an intentionally long caption to show the margins.

2.2 Lorem ipsum

Lorem ipsum dolor sit amet, consectetuer adipiscing elit. Ut purus elit, vestibulum ut, placerat ac, adipiscing vitae, felis. Curabitur dictum gravida mauris. Nam arcu libero, nonummy eget, consectetuer id, vulputate a, magna. Donec vehicula augue eu neque. Pellentesque habitant morbi tristique senectus et netus et malesuada fames ac turpis egestas. Mauris ut leo. Cras viverra metus rhoncus sem. Nulla et lectus vestibulum urna fringilla ultrices. Phasellus eu tellus sit amet tortor gravida placerat. Integer sapien est, iaculis in, pretium quis, viverra ac, nunc. Praesent

Table 2.1: Test table with some mathematical constants.

Name	Symbol	Value
Euler constant	e	$2.71\ldots$
Circle constant	π	$3.14\ldots$
Imaginary identity	i	$\sqrt{-1}$

eget sem vel leo ultrices bibendum. Aenean faucibus. Morbi dolor nulla, malesuada eu, pulvinar at, mollis ac, nulla. Curabitur auctor semper nulla. Donec varius orci eget risus. Duis nibh mi, congue eu, accumsan eleifend, sagittis quis, diam. Duis eget orci sit amet orci dignissim rutrum.

Nam dui ligula, fringilla a, euismod sodales, sollicitudin vel, wisi. Morbi auctor lorem non justo. Nam lacus libero, pretium at, lobortis vitae, ultricies et, tellus. Donec aliquet, tortor sed accumsan bibendum, erat ligula aliquet magna, vitae ornare odio metus a mi. Morbi ac orci et nisl hendrerit mollis. Suspendisse ut massa. Cras nec ante. Pellentesque a nulla. Cum sociis natoque penatibus et magnis dis parturient montes, nascetur ridiculus mus. Aliquam tincidunt urna. Nulla ullamcorper vestibulum turpis. Pellentesque cursus luctus mauris.

Nulla malesuada porttitor diam. Donec felis erat, congue non, volutpat at, tincidunt tristique, libero. Vivamus viverra fermentum felis. Donec nonummy pellentesque ante. Phasellus adipiscing semper elit. Proin fermentum massa ac quam. Sed diam turpis, molestie vitae, placerat a, molestie nec, leo. Maecenas lacinia. Nam ipsum ligula, eleifend at, accumsan nec, suscipit a, ipsum. Morbi blandit ligula feugiat magna. Nunc eleifend consequat lorem. Sed lacinia nulla vitae enim. Pellentesque tincidunt purus vel magna. Integer non enim. Praesent euismod nunc eu purus. Donec bibendum quam in tellus. Nullam cursus pulvinar lectus. Donec et mi. Nam vulputate metus eu enim. Vestibulum pellentesque felis eu massa.

Quisque ullamcorper placerat ipsum. Cras nibh. Morbi vel justo vitae lacus tincidunt ultrices. Lorem ipsum dolor sit amet, consectetuer adipiscing elit. In hac habitasse platea dictumst. Integer tempus convallis augue. Etiam facilisis. Nunc elementum fermentum wisi. Aenean placerat. Ut imperdiet, enim sed gravida sollicitudin, felis odio placerat quam, ac pulvinar elit purus eget enim. Nunc vitae tortor. Proin tempus nibh sit amet nisl. Vivamus quis tortor vitae risus porta vehicula.

Fusce mauris. Vestibulum luctus nibh at lectus. Sed bibendum, nulla a faucibus semper, leo velit ultricies tellus, ac venenatis arcu wisi vel nisl. Vestibulum diam. Aliquam pellentesque,

augue quis sagittis posuere, turpis lacus congue quam, in hendrerit risus eros eget felis. Maecenas eget erat in sapien mattis porttitor. Vestibulum porttitor. Nulla facilisi. Sed a turpis eu lacus commodo facilisis. Morbi fringilla, wisi in dignissim interdum, justo lectus sagittis dui, et vehicula libero dui cursus dui. Mauris tempor ligula sed lacus. Duis cursus enim ut augue. Cras ac magna. Cras nulla. Nulla egestas. Curabitur a leo. Quisque egestas wisi eget nunc. Nam feugiat lacus vel est. Curabitur consectetuer.

Suspendisse vel felis. Ut lorem lorem, interdum eu, tincidunt sit amet, laoreet vitae, arcu. Aenean faucibus pede eu ante. Praesent enim elit, rutrum at, molestie non, nonummy vel, nisl. Ut lectus eros, malesuada sit amet, fermentum eu, sodales cursus, magna. Donec eu purus. Quisque vehicula, urna sed ultricies auctor, pede lorem egestas dui, et convallis elit erat sed nulla. Donec luctus. Curabitur et nunc. Aliquam dolor odio, commodo pretium, ultricies non, pharetra in, velit. Integer arcu est, nonummy in, fermentum faucibus, egestas vel, odio.

Sed commodo posuere pede. Mauris ut est. Ut quis purus. Sed ac odio. Sed vehicula hendrerit sem. Duis non odio. Morbi ut dui. Sed accumsan risus eget odio. In hac habitasse platea dictumst. Pellentesque non elit. Fusce sed justo eu urna porta tincidunt. Mauris felis odio, sollicitudin sed, volutpat a, ornare ac, erat. Morbi quis dolor. Donec pellentesque, erat ac sagittis semper, nunc dui lobortis purus, quis congue purus metus ultricies tellus. Proin et quam. Class aptent taciti sociosqu ad litora torquent per conubia nostra, per inceptos hymenaeos. Praesent sapien turpis, fermentum vel, eleifend faucibus, vehicula eu, lacus.

3 Conclusion

This would be a natural place to summarize your main results, and perhaps provide an outlook for future developments in the field.

Bibliography

1. **R. Feynman, R. Leighton, M. Sands.**
   The Feynman Lectures on Physics 2nd edition, 36–38 (1963).
   ISBN: 9780201021165

2. **M. Lipovaca.**
   Learn You a Haskell for Great Good! 1st ed. (2011).
   ISBN: 9781593272838

3. **J. Beringer *et al.***
   Review of Particle Physics.
   Physical Review D 86, 10–20 (2012).
   DOI: 10.1103/physrevd.86.010001