THE UNIVERSITY OF
MELBOURNE

School of Physics

A SIMPLE & CONFIGURABLE PhD THESIS TEMPLATE

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Submitted in total fulfilment of the requirements of the degree of Doctor of Philosophy

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Dedicated to Schrödinger's Cat

Abstract

Your Abstract of 300-500 words should go here.

This template attempts to help you to start your thesis. It is full of many things that were used to generate my thesis and make it the way that I wanted it to look, professional but chic :)

Declaration

This is to certify that:

(i) the thesis comprises only my original work towards the PhD except where indicated,

(ii) due acknowledgement has been made in the text to all other material used,

(iii) the thesis is less than 100,000 words in length, exclusive of table, maps, bibliographies, appendices and footnotes.

Your name in full

Publications

During the course of this project, a number of public presentations have been made which are based on the work presented in this thesis. They are listed here for reference.

- **A. Student, A. Collaborator and Y. Supervisor,** *Something about nothing*, Some Obscure Journal, vol. V (Year) p. x.
- **A. Student, A. Collaborator and Y. Supervisor,** *More about nothing*, Crazy Physics Journal, vol. V (Year) p. x.

Acknowledgements

You may want to leave this until right at the end. You never know who will come out of the woods to save the day. Don't forget to thank your producer, your parents and Jesus.

Introduction

You should introduce the scope of your work here... why are you doing it?

For example, this template is here to help you to stop procrastinating and start writing this thing they call a thesis. The sooner you start the better, it can take up to half a year of solid thinking and writing to complete; even if writing does come naturally to you.

Many people say that writing papers helps. Sometimes it does, sometimes it doesn't. It depends if your ideas about the work has changed at all and also how in depth your papers were. Often journal articles need to be kept brief and concise, a thesis need not be.

There are also certain things in the .tex files that made writing easier. Such as the definition of commands that allowed me to quickly generate things like: cm^2, 100°C & 4×4 while typing.

Note that this is in book style and two page mode. The margins have been adjusted so that when printing double sided, there is always a larger margin where the spine is. This is to allow for part of the page to be swallowed up during the binding process. I printed the PDF from Adobe Reader rather than printing the postscript with ghostview so you may need to adjust the margins depending on what you are using. This may also change depending on how you compile it. See the windows .bat file for an example of how I compiled my files.

Note that the PDF of this template is pretty much useless except for seeing what it will look like when you latex it all up. The real use of this template is the tex files and commands contained within them.

Contents

List of Tables

List of Figures

Part I

Background

Chapter 1

Your Review of the Literature

Contents

1.1 Section Name

1.1.1 Subsection 1

Sub-Subsection

This is what other people have done blah blah.

Here are some references [1, 2, 3]. Here is another reference from another Bibtex bibliographic database [4]. Don't forget that Bibtex does is generally not case-sensitive and does everything in lower case. This is a big problem if your papers use the abbreviated names for elements; you'll need to put braces... you know these things: {, } around them to maintain the case. See the way [4] is done in the second database.

1.2 Another Section

I recommend using something like Endnote to keep an electronic track of what is in all of those manilla folders you have full of papers. This way you can let your fingers do the walking when you can't remember where that pesky paper is or who the authors are. Then just export them in Bibtex format and Bibtex will take

only what it needs. I did however find that there seemed to be a limit to what either Miktex or my PC could handle and I had to keep the number of Bibtex database (.bib) files to around 7 otherwise it would for some reason truncate my total number of references. Then again I did have over 100 references in my review section. Setting the number of references in the bibliography with the {#} option in bibliography style didn't seem to help.

1.2.1 Not another subsection

References

[1] An Author, Yet Another Author, Some Collaborator, and Their Boss. A really good reference. *Journal of Smartie Pants*, 16:2, 1979.

[2] An Author, Yet Another Author, Some Collaborator, and Their Boss. They stole my work. *Journal of Cranky Pants*, 6(6):666, 1984.

[3] An Author, Yet Another Author, Some Collaborator, and Their Boss. A crap paper that I should reference anyway. *Journal of Dumbo's*, 1(1):8, 2001.

[4] An Author, Yet Another Author, Some Collaborator, and Their Boss. If the paper talks about elements like Si and Rb you need braces around them to maintain the case. *Journal of Smartie Pants*, 79(2):123, 2010.

Part II

Research Work

Chapter 2

Your Research Chapter

Contents

Perhaps a brief introduction to the chapter. Even if you have introduced it in the introduction chapter, just to remind the examiner what's going on. Address WHAT was studied and WHY you want to study it, re-iterate what is in the introduction.

2.1 Section Name

2.1.1 Subsection 1

Sub-Subsection

This is what I did blah blah.

Here are some references for no apparent reason [1, 2]. Oh, here is a cross-reference for the sake of it, see Chapter 1. Perhaps take a look at Section 1.1.1 while you're there. Note that I always use the tilde between the reference type and the ref command so that the number and the word do not get split up over a line by Latex.

I've also put a random image from my thesis just for completion (Fig. 2.1). I tended to keep my images in sub-folders so that the main thesis folder did not get cluttered.

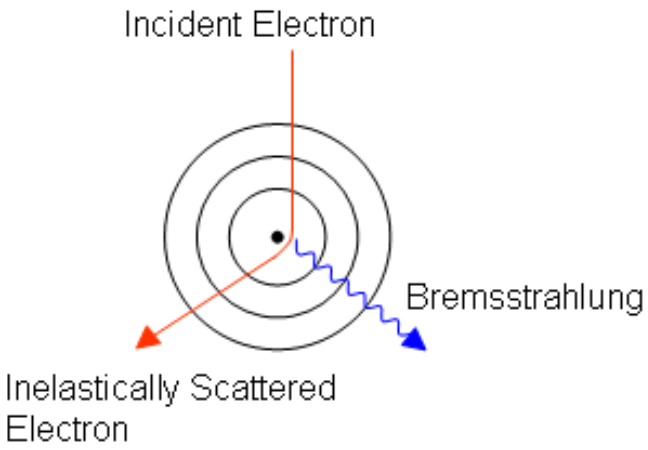

Figure 2.1: This is a random plot from the PhD thesis of Matthew D. H. Lay [3].

2.2 Another Section

Eq. 2.1 doesn't mean much. It just shows how to align your equal signs along with other math syntax:

$$\begin{aligned} f =& \frac{\hbar}{2}\left(x_a + x_{bc}\ sin(\Omega t) + \phi\right)^2 \\ \text{let } \alpha = x_a + \phi& \\ \Rightarrow f =& \frac{\hbar}{2}\left\{\alpha^2 + 2\alpha x_{bc}\ sin(\Omega t) + x_{bc}^2\ sin^2(\Omega t)\right\} \\ =& \frac{\hbar}{2}\left\{\alpha^2 + 2\alpha x_{bc}\ sin(\Omega t) + \frac{1}{2}x_{bc}^2[1 - cos(2\Omega t)]\right\} \\ =& \frac{\hbar}{2}\left\{\alpha^2 + \frac{1}{2}x_{bc}^2 + 2\alpha x_{bc}\ sin(\Omega t) - \frac{1}{2}x_{bc}^2\ cos(2\Omega t)\right\} \end{aligned} \tag{2.1}$$

2.2.1 A subsection

OK i'm trying to fill this space so I can make another page so that you can see what the fancy headers look like.

References

[1] An Author, Yet Another Author, Some Collaborator, and Their Boss. They stole my work. *Journal of Cranky Pants*, 6(6):666, 1984.

[2] An Author, Yet Another Author, Some Collaborator, and Their Boss. A crap paper that I should reference anyway. *Journal of Dumbo's*, 1(1):8, 2001.

[3] Matthew D. H. Lay. *Defect Studies of Ion Implanted Silicon & Silicon-Dioxide For Semiconductor Devices*. PhD thesis, The University of Melbourne, 2006.