Title of your Dissertation

by

Buckingham U. Badger

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Thesis Committee:

Paul P.H. Wilson, Professor, Engineering Physics
Member 1, title 1, Affiliation 1
Member 2, title 2, Affiliation 2
Member 3, title 3, Affiliation 3
Member 4, title 4, Affiliation 4

I dedicate this to myself because I have worked very hard on it.

Acknowledgments

You probably also want to thank the Academy. Jk.

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Nomenclature

DAGMC Direct Accelerated Geometry Monte Carlo

MCNP Monte Carlo N-Particle transport code

OBB oriented bounding box

Abstract

This is my abstract that gives an overview of how exciting and important my dissertation is. Yay. Note that this abstract may or may not be the same abstract you submit to the Proquest/UMI website when you submit your dissertation. The electronic abstract required when you deposit must be 350 words or less. The abstract in this document may be longer.

Chapter 1

Introduction

First example of content is this introduction. It is listed as a chapter and included in the main .tex document.

Let's use some acronyms just so they appear in our list in the frontmatter. I work with the Direct Accelerated Geometry Monte Carlo (DAGMC) toolkit. It couples with the Monte Carlo N-Particle (MCNP) code and it uses oriented bounding boxes (OBBs).

Chapter 2

Background

Here is another chapter example with sections and subsections.

2.1 Monte Carlo Radiation Transport

Blah blah blah.. background information in a section with equations and a reference to MCNP [1]. Also we used the $\backslash ac\{\}$ command to write MCNP. Now we will also refer to Equation (2.1) without having to actually type out the word "Equation" by using $\backslash cref\{\}$. We can do the same for referring to Section 2.1.1 that appears below this. Also try clicking on the section number in the last sentence.

$$FOM = \frac{1}{R^2 t_{proc}} \tag{2.1}$$

Equation (2.2) is an example using split equations.

$$\begin{aligned} \sigma_x^2 &= \frac{\sum (x_i - \bar{x})^2}{N-1} \\ \sigma_{\bar{x}}^2 &= \frac{\sigma_x^2}{N} \end{aligned} \tag{2.2}$$

2.1.1 Variance Reduction

Below is an example figure with a caption (see Figure 2.1). Here is an example list:

1. first
    - sublist using bullets

- another item

2. second

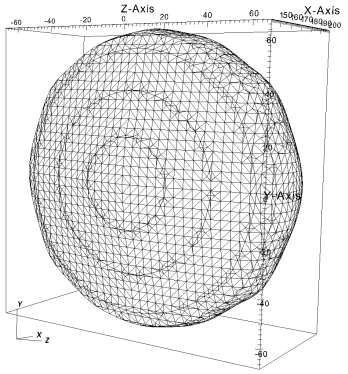

Figure 2.1: Here is a super long description and caption for this image. It is probably something we don't want to be fully written out in the list of figures at the beginning of the document. So we can use a shortened caption in square brackets in the text. It won't appear here, but that is what goes in the list.

Here is an example table to appear in list of tables (see Table 2.1). It also uses $\backslash num\{\}$ and $\backslash SI\{\}\{\}$ for formatting the numbers. The table includes a mix of standard table formatting such as the vertical bar | and $\backslash hline$ and $\backslash cline$ as well as fancier formatting from booktabs package such as $\backslash toprule$, $\backslash midrule$, and $\backslash bottomrule$. Play around with formatting to see what you like best.

Table 2.1: Example Table

A	**B**	**Some numbers**
Joe	Smoe	98.34%
Lisa	Pisa	1×10^{10}
Hannah	Banana	0.005
Tom	Thompson	0.5 cm
Woah merged cells!		so cool
XY	we can merge rows too	omg
	and rotate the text!	how cool

2.2 Summary

In summary, we know stuff.

Bibliography

[1] X-5 Monte Carlo Team, *MCNP - A General Monte Carlo N-Particle Transport Code, Version 5: Volume I: Overview and Theory*, Los Alamos National Laboratory, version 5 ed. (2008).

Appendix I

Title of first appendix

Use the appendix for all the extra data and such. These will automatically be called an "Appendix" so you can use a more specific title for each.

Appendix II

Another appendix

Example of a second appendix. Formatting requirements say that appendices should be numbered but they are allowed to be single spaced.