

**THIS IS THE TITLE**

by

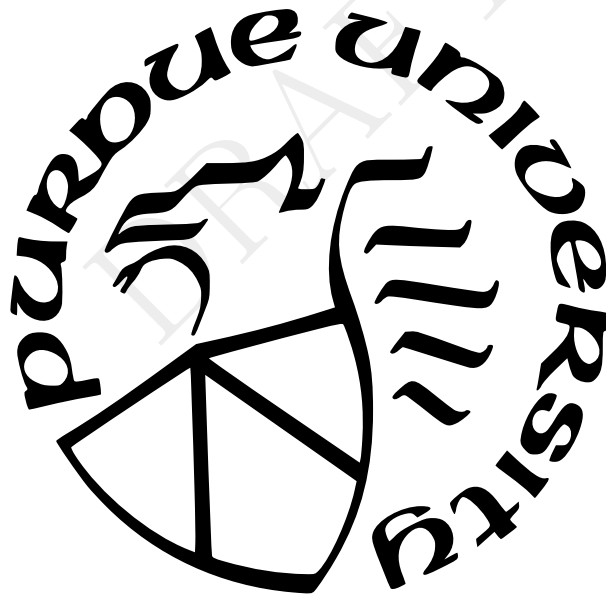
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**A Dissertation**

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## LIST OF FIGURES

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## ABSTRACT

PurdueThesis is a L<sup>A</sup>T<sub>E</sub>X document class used for master's bypass reports, master's theses, PhD dissertations, and PhD preliminary reports. This template demonstrates how to use PurdueThesis.

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# 1. INTRODUCTION

Experimenting with the available typographic conventions defined in the Purdue file: `pa-typographic-conventions.sty`: these include *Emph First Title* `[Keys]` `Literal` `[Menu]` `[Open menu]` `[Preferences]` **Shell.sh**. Now let's try out a footnote<sup>1</sup>, one of the fancy TODO notes `, and more scary TODO ,` as well as `a a todo error as well as a citation [1]`. Note the TODO comments currently only show up in quick or debug modes (for now).

## 1.1 Subcaption / Cleveref Testing

Here is a very important and informative figure for Orion. You can see in Figure 1.1 that there is both Figure 1.1(a) and Figure 1.1(b)! There is also important information in Table 1.1. If you're confused, then Equation (1.1) should clarify things. Some other ways to put it: Equations (1.1) and (1.2) and Equations (1.1) to (1.3).

### 1.1.1 Important Math

$$e^{i\pi} + 1 = 0 \tag{1.1}$$

$$a^2 + b^2 = c^2 \tag{1.2}$$

$$\frac{df}{dt} = \lim_{h \rightarrow 0} \frac{f(t+h) - f(t)}{h} \tag{1.3}$$

### 1.1.2 Numbers/Units

Some of the number formats available:  $-10^{10}$ .  $2 \times 4$ . 10 to 11.  $12.3^\circ$ .

Experimenting with the siunits package:  $8 \text{ kg m s}^{-2}$ . 9N.  $2.3 \times 10^{27} \text{ kg}$ .  $1.345 \frac{\text{C}}{\text{mol}}$ .

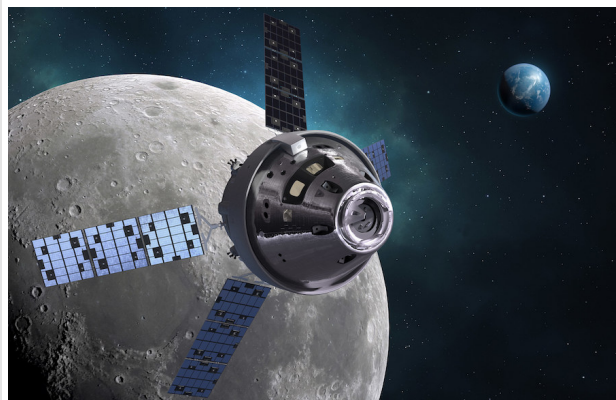
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<sup>1</sup>[↑](#)I'm a footnote!

Do I really need this?

Be careful here

This is wrong!



(a) Orion 1



(b) Orion 2

**Figure 1.1.** Two images of Orion: (a) and (b).

**Table 1.1.** Sample Table

Sample	Table
$x$	2



## A subsubsection

A subsubsection for testing out the table of contents

## A paragraph

What happens for a paragraph in the table of contents?

### 1.1.3 Custom variables

Variables can be defined as functions in `t0-template` `te4-custom-variables.tex`

The rotating  $x$  axis is clearly the best of all axes. But even better is the  $\boldsymbol{x}$  vector and the  $\hat{x}$  direction! See the appenix in Debug mode for details

### 1.1.4 Custom colors

There are a variety of available colors from Purdue's branding<sup>2</sup> like: Boilermaker Gold, Rush. This example document also include the Tableau colors<sup>3</sup>. For example, tab-blue and tab-red.

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<sup>2</sup>↑see <https://marcom.purdue.edu/our-brand/visual-identity/>

<sup>3</sup>↑used in matplotlib - [https://matplotlib.org/3.4.1/gallery/color/named\\_colors.html](https://matplotlib.org/3.4.1/gallery/color/named_colors.html)

## **2. BACKGROUND**

### **2.1 Dynamical Model**

### **2.2 Blockchains, or Whatever**

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## User-Defined Variables

*Note: Currently does not support Greek letter sorting*

$\beta$ : \angleTwo

$\alpha$ : \angleOne

$\Pi$ : \angleFour

$\Gamma$ : \angleThree

$C$ : \otherCvar

$\mathbb{C}$ : \Complex

$\mathbb{E}$ : \ExpVal

$\mathcal{H}$ : \hamiltonian

$\mathcal{L}$ : \lagrangian

$N$ : \nBody

$\mathcal{N}$ : \Normal

$\mathbb{R}$ : \Real

$\mathcal{U}$ : \Uniform

$X$ : \xDim

$Y$ : \yDim

$Z$ : \zDim

$x$ : \xNd

$\boldsymbol{x}$ : \vectorFormat

$\hat{x}$ : \unitVectorFormat

$x^2$ : \xSquared

$x_2$ : \xSubTwo

$x_2^2$ : \xSubTwoSquared

$y$ : \yNd

$\boldsymbol{y}^2$ : \aVectorSquared

$z$ : \zNd

Would it  
be bet-  
ter ignore  
capital-  
ization?

## VITA

[Put a brief autobiographical sketch here.]

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## REFERENCES

- [1] K. C. Howell, “Three-dimensional, periodic, ‘halo’ orbits,” *Celestial Mechanics*, vol. 32, no. 1, pp. 53–71, 1984. DOI: [10.1007/BF01358403](https://doi.org/10.1007/BF01358403).

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