### **DISSERTATION**

submitted

to the

Combined Faculties for the Natural Sciences and for Mathematics

of the

Ruperto-Carola University of Heidelberg, Germany

for the degree of

**Doctor of Natural Sciences** 

Put forward by

(name and surname)

born in: (place of birth)

Oral Examination: (date of examination)

(Title)

(of)

(Thesis)

Referees: Prof. Dr. (Name of the 1st referee)

Prof. Dr. (Name of the 2nd referee)

#### Abstract

(abstract in english. Example: [1])

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#### Zusammenfassung

(Abstract in Deutsch. Beispiel: [1])

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# **Chapter 1**

## Introduction

Here is the introduction...

# **Chapter 2**

# **Experiment**

Here is the experiment description.

# **Chapter 3**

## Summary

Here is the summary.

# **Appendix**

## **Appendix A**

## Some extra stuffs

Here is some extra stuff.

### A.1 Standalone Package

When draw some figure with Tikz, it is nicer to try out the drawing in the small "test bench" rather than do the drawing in the main dissertation latex project and compile the whole document again and again.

The standalone package provides the possibility of putting the figure environments to their own source code files and compiling them in a small "test bench" main file: standalone\_test.tex.

The figure environments can be put to the dissertation document using \input{} command. As an example, Figure A.1 is included here with:

```
begin{figure}[!h]
centering
input{appendix/pokemon_ball.tex}
caption{A drawing of pokemon ball.}
label{fig:standalone}
cend{figure}
```



Figure A.1: A drawing of pokemon ball.

### A.2 Adding Annotation to figure

A snippet of adding annotations to the figures can be found in *appendix/annotation.tex*. The help lines and the coordination is drawn for adding annotations. The help lines and the coordination can be turned off after adding the annotations.

With the help lines and coordination, the figure shown in Figure A.2.

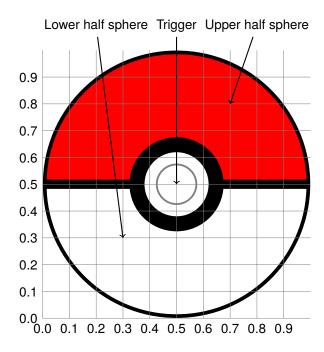


Figure A.2: Example of Adding Annotation to Figure.

### A.3 Big O

The "Big O", the order of, is show as O using the math font provided by *newtxmath* package. In order to get the symbol like O, a new symbol is declared using the Computer Modern math font in *setup/macros.tex*:

```
\DeclareSymbolFont{cmfonts}{OMS}{cmsy}{m}{n}
\DeclareMathSymbol{\cmbigO}{\mathord}{cmfonts}{`O}
\newcommand{\bigO}{\mathcal{\cmbigO}}}
\end{\declareMathcal{\cmbigO}}
\]
\[
\text{Newcommand}{\text{Newcommand}}
\]
\[
\text{Newcommand}
\]
\[
\text{Newcommand}{\text{Newcommand}}
\]
\[
\text{Newcommand}
\]
\[
\text{Newcommand
```

 $\mathcal{O}$ , and  $\mathcal{O}$  produces  $\mathcal{O}$ , and  $\mathcal{O}$ .

# Appendix B

## Lists

B.1 List of Figures	
A.1 A drawing of pokemon ball	_
B.2 List of Tables	

# **Appendix C**

# **Bibliography**

[1] URL: http://la.wikisource.org/wiki/Lorem\_ipsum.

## Acknowledgements

I would like to thank many people who have helped me during the last few years.