Thesis Title

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There are many people that have earned my gratitude for their contribution to my time in graduate school.

Dedication

To those who held me up over the years

Abstract

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Introduction

- Chapter 2 briefly presents the history of, and science behind, the subjects presented in this thesis.
- In Chapter 3 the experiment is outlined.
- Chapter 4 describes the simulation process used in the analysis.
- Chapter 5 follows the chain of reconstruction software used to obtain meaningful results from data.
- Chapter 6 hashes out the strategy for analysis and presents the data and simulated sets that will be used in the analysis.
- Chapter 7 demonstrates the implementation of the event selection processes.
- In Chapter 8 those events selected in Chapter 7 are analyzed.
- Chapter 9 presents a final discussion of the analyses presented in the thesis.

Chapter 2

Physics of Neutrinos

Chapter 3

Experiment

Chapter 4

Simulation

Chapter 5

Event Reconstruction

Chapter 6

Data Analysis Strategy

Chapter 7

Event Selection

Chapter 8

Analysis

8.1 Analysis Procedure

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Conclusion and Discussion

Appendix A

Glossary and Acronyms

Care has been taken in this thesis to minimize the use of jargon and acronyms, but this cannot always be achieved. This appendix defines jargon terms in a glossary, and contains a table of acronyms and their meaning.

A.1 Glossary

- **Cosmic-Ray Muon** (**CR** μ) – A muon coming from the abundant energetic particles originating outside of the Earth's atmosphere.

A.2 Acronyms

Table A.1: Acronyms

Acronym	Meaning
CRμ	Cosmic-Ray Muon