

# Example Document

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## 1 Introduction

This is the first chapter of our document. It contains some basic text and demonstrates the functionality of the LaTeX expansion tool.

### 1.1 Background

Here we discuss the background of our work. This section has been significantly expanded in this version of the document with new research findings.

$$E = mc^2 \tag{1}$$

The famous equation above shows the relationship between energy and mass. We have also discovered that this relationship has important implications for our research.

## 2 Methods

This chapter describes the methods used in our research.

### 2.1 Experimental Setup

We used the following equipment:

- Microscope
- Computer
- Data acquisition system

### 2.2 Data Analysis

The data was analyzed using statistical methods and specialized software.