First Document

Matt Chan 1

August 2019

 $^{^{1}}$ Overleaf Tutorial

Abstract

This is a simple paragraph at the beginning of the document. A brief introduction about the main subject.

First document. This is a simple example, with no extra parameters or packages included.

Some of the **greatest** discoveries in <u>science</u> were made by *accident*. Some of the greatest *discoveries* in science were made by accident. Some of the greatest discoveries in science were made by accident. Some of the greatest discoveries in science were made by accident.

The universe is immense and it seems to be homogeneous, in a large scale, everywhere we look at.



There's a picture of a galaxy above.

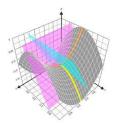


Figure 1: A nice plot.

As you can see in the figure 1, the function grows near 0. Also, in the page 1 is the same example.

- The individual entries are indicated with a black dot, a so-called bullet.
- The text in the entries may be of any length.
- 1. This is the first entry in our list
- 2. The list numbers increase with each entry we add

In physics, the mass-energy equivalence is stated by the equation $E=mc^2$, discovered in 1905 by Albert Einstein.

The mass-energy equivalence is described by the famous equation

$$E = mc^2$$

discovered in 1905 by Albert Einstein. In natural units (c = 1), the formula expresses the identity

$$E = m \tag{1}$$

Subscripts in math mode are written as a_b and superscripts are written as a^b . These can be combined and nested to write expressions such as

$$T^{i_1 i_2 \dots i_p}_{j_1 j_2 \dots j_q} = T(x^{i_1}, \dots, x^{i_p}, e_{j_1}, \dots, e_{j_q})$$
 (2)

We write integrals using \int and fractions using $\frac{a}{b}$. Limits are placed on integrals using superscripts and subscripts:

$$\int_0^1 \frac{1}{e^x} = \frac{e-1}{e}$$
 (3)

Lower case Greek letters are written as ω δ etc. while upper case Greek letters are written as Ω Δ .

Mathematical operators are prefixed with a backlash as $\sin(\beta), \cos(\alpha), \log(x)$ etc.

Contents

1	\mathbf{Firs}	st Chapter	4
	1.1	Introduction	4
	1.2	Second Section	4
		1.2.1 First Subsection	4

Chapter 1

First Chapter

1.1 Introduction

This is the first section.

Lorem ipsum dolor sit amet, consectetur adipisicing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua. Ut enim ad minim veniam, quis nostrud exercitation ullamco laboris nisi ut aliquip ex ea commodo consequat. Duis aute irure dolor in reprehenderit in voluptate velit esse cillum dolore eu fugiat nulla pariatur. Excepteur sint occaecat cupidatat non proident, sunt in culpa qui officia deserunt mollit anim id est laborum.

1.2 Second Section

Lorem ipsum dolor sit amet, consectetur adipisicing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua. Ut enim ad minim veniam, quis nostrud exercitation ullamco laboris nisi ut aliquip ex ea commodo consequat. Duis aute irure dolor in reprehenderit in voluptate velit esse cillum dolore eu fugiat nulla pariatur. Excepteur sint occaecat cupidatat non proident, sunt in culpa qui officia deserunt mollit anim id est laborum.

1.2.1 First Subsection

Lorem ipsum dolor sit amet, consectetur adipisicing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua. Ut enim ad minim veniam, quis nostrud exercitation ullamco laboris nisi ut aliquip ex ea commodo consequat. Duis aute irure dolor in reprehenderit in voluptate velit esse cillum dolore eu fugiat nulla pariatur. Excepteur sint occaecat cupidatat non proident, sunt in culpa qui officia deserunt mollit anim id est laborum.

Unnumbered Section

Lorem ipsum dolor sit amet, consectetur adipisicing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua. Ut enim ad minim veniam, quis nostrud exercitation ullamco laboris nisi ut aliquip ex ea commodo consequat. Duis aute irure dolor in reprehenderit in voluptate velit esse cillum dolore eu fugiat nulla pariatur. Excepteur sint occaecat cupidatat non proident, sunt in culpa qui officia deserunt mollit anim id est laborum.

cell1	cell2	cell3
cell4	cell5	cell6
cell7	cell8	cell9

cell1	cell2	cell3
cell4	cell5	cell6
cell7	cell8	cell9

Table 1.1 is an example of referenced LATEX elements.

Col2	Col3	Col4
6	87837	787
7	78	5415
545	778	7507
545	18744	7560
88	788	6344
	6 7 545 545	6 87837 7 78 545 778 545 18744

Table 1.1: Table to test captions and labels