# First documuent

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 $<sup>^1\</sup>mathrm{motivated}$  by 2020-1 DL class

Title has been added to LATEX document!

This word will be in **bold**, and this one in <u>underline</u>, finally this one in **bold**, **underline**, **and italic**.

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



Above is a picture of our galaxy, the Milky Way.



Figure 1: supposed to be a caption

Above is an example of LaTeX caption of the figure 1. This is the reference to the page of it, the page 1.

- The individual entries are indicated with a black dot, a so-called bullet.
- The text in the entries may be of any length.
- 1. Republic of Korea is an democratic republic.
- 2. All power derive from the people.

In phycis, the mass-energy equivalence is stated by the equation  $E=mc^2$ , discovered in 1905 by Alert 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

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

Superscript:  $e^{ix}$ Subscript:  $p_i$ 

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

$$\int_0^1 \frac{1}{x} dx \omega^2 + \omega + 1 = 0\delta \Delta O(n) \Omega(n) o(n) \sin(\alpha + \beta) = \sin(\alpha) \cos(\beta) + \sin(\beta) \cos(\alpha)$$

Whan that Aprille, with his shoures soote, The droughte of Marche, hath perced to the roote,

## Chapter 1

## First Chapter

#### 1.1 Introduction

Lorem ipsum dolor sit amet, consectetur adipiscing elit. Nunc sit amet odio facilisis, placerat risus quis, commodo ipsum. Sed dolor urna, accumsan in augue vel, viverra blandit diam. Aliquam urna magna, vestibulum a magna at, malesuada porttitor mi. Mauris non tincidunt dui. Vivamus sed sem eu massa efficitur euismod. Pellentesque feugiat mattis tortor eu egestas. Suspendisse eleifend nisl eu tortor congue, id bibendum risus vestibulum. Integer id sollicitudin mauris. Nam ut est ut sem facilisis viverra ut eu nulla.

### 1.2 First Section

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### 1.3 Second Section

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#### 1.3.1 A note to the readers

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$$a_{11}$$
  $a_{12}$   $a_{13}$ 
 $a_{21}$   $a_{22}$   $a_{23}$ 
 $a_{31}$   $a_{32}$   $a_{33}$ 

Table 1.1: An example of 3x3 matrix from LATEX.

Table 1.1 is an example of a 3x3 matrix.

1	0	0
0	1	0
0	0	1