Primeira edição

# Título do livro
## Subtítulo do livro

Fernando Pujaico Rivera

Lavras/MG
2020

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*Amicum lege feliciter, vivas, gaudeas, floreas in Deo.*
*Fernando*

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*Dou muitas graças a Deus*

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Fernando Pujaico Rivera

# Prólogo

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Nam dui ligula, fringilla a, euismod sodales, sollicitudin vel, wisi. Morbi auctor lorem non justo. Nam lacus libero, pretium at, lobortis vitae, ultricies et, tellus. Donec aliquet, tortor sed accumsan bibendum, erat ligula aliquet magna, vitae ornare odio metus a mi. Morbi ac orci et nisl hendrerit mollis. Suspendisse ut massa. Cras nec ante. Pellentesque a nulla. Cum sociis natoque penatibus et magnis dis parturient montes, nascetur ridiculus mus. Aliquam tincidunt urna. Nulla ullamcorper vestibulum turpis. Pellentesque cursus luctus mauris.

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# Parte I

# Sample of text

CAPÍTULO

1

# An example of chapter title with large legth

*Lorem ipsum dolor sit amet, consectetuer adipiscing elit. Ut purus elit, vestibulum ut, placerat ac, adipiscing vitae, felis. Curabitur dictum gravida mauris.*

*The author name*

Lorem ipsum dolor sit amet, consectetuer adipiscing elit. Ut purus elit, vestibulum ut, placerat ac, adipiscing vitae, felis. Curabitur dictum gravida mauris.

## 1.1 An example of section title with large length

Lorem ipsum dolor sit amet, consectetuer adipiscing elit. Ut purus elit, vestibulum ut, placerat ac, adipiscing vitae, felis. Curabitur dictum gravida mauris. Referencia a la Información 1.1.1 (siguiente)

**Título A:** Lorem ipsum dolor sit amet, consectetuer adipiscing elit. Ut purus elit, vestibulum ut, placerat ac, adipiscing vitae, felis. Curabitur dictum gravida mauris.

Lorem ipsum dolor sit amet, consectetuer adipiscing elit. Ut purus elit, vestibulum ut, placerat ac, adipiscing vitae, felis. Curabitur dictum gravida mauris. Nam arcu libero, nonummy eget, consectetuer

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**Text**

Lorem ipsum dolor sit amet, consectetuer adipiscing elit. Ut purus elit, vestibulum ut, placerat ac, adipiscing vitae, felis. Curabitur dictum gravida mauris. Referencia a las Frases 1.1.1 y 1.0.1

**Frase 1.1.1: Frase title A**

Lorem ipsum dolor sit amet, consectetuer adipiscing elit. Ut purus elit, vestibulum ut, placerat ac, adipiscing vitae, felis.

Autor

Lorem ipsum dolor sit amet, consectetuer adipiscing elit. Ut purus elit, vestibulum ut, placerat ac, adipiscing vitae, felis. Curabitur dictum gravida mauris.

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## 1.2 Another title

This statement requires citation [Smi12]; this one is more specific [Smi13, página 122]. Lorem ipsum dolor sit amet, consectetuer adipiscing elit. Ut purus elit, vestibulum ut, placerat ac, adipiscing vitae, felis. Curabitur dictum gravida mauris. Nam arcu libero, nonummy eget, consectetuer id, vulputate a, magna.

Referencia a la Información 1.2.1 (siguiente)

**Título B:** Lorem ipsum dolor sit amet, consectetuer adipiscing elit. Ut purus elit, vestibulum ut, placerat ac, adipiscing vitae, felis. Curabitur dictum gravida mauris.[a]

[a] Simple footnote example.

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[a] Simple footnote example.

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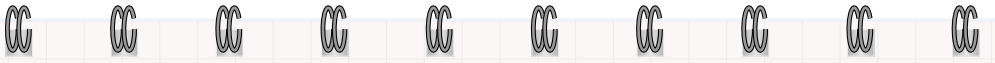
eget orci sit amet orci dignissim rutrum.

Referencia a la Información 1.2.1 (siguiente)



**Elaboração 1.2.1: Título C**

Lorem ipsum dolor sit amet, consectetuer adipiscing elit. Ut purus elit, vestibulum ut, placerat ac, adipiscing vitae, felis. Curabitur dictum gravida mauris.

Lorem ipsum dolor sit amet, consectetuer adipiscing elit. Ut purus elit, vestibulum ut, placerat ac, adipiscing vitae, felis. Curabitur dictum gravida mauris. Nam arcu libero, nonummy eget, consectetuer id, vulputate a, magna. Donec vehicula augue eu neque. Pellentesque habitant morbi tristique senectus et netus et malesuada fames ac turpis egestas. Mauris ut leo. Cras viverra metus rhoncus sem. Nulla et lectus vestibulum urna fringilla ultrices. Phasellus eu tellus sit amet tortor gravida placerat. Integer sapien est, iaculis in, pretium quis, viverra ac, nunc. Praesent eget sem vel leo ultrices bibendum. Aenean faucibus. Morbi dolor nulla, malesuada eu, pulvinar at, mollis ac, nulla. Curabitur auctor semper nulla. Donec varius orci eget risus. Duis nibh mi, congue eu, accumsan eleifend, sagittis quis, diam. Duis eget orci sit amet orci dignissim rutrum.

## 1.3 Another title with a large length

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**THEOREM 1.3.1**

**Name of the theorem**

Lorem ipsum dolor sit amet, consectetuer adipiscing elit. Ut purus elit, vestibulum ut, placerat ac, adipiscing vitae, felis. Curabitur dictum gravida mauris.

$$x^2 + e^{-\frac{x^2}{2}} = 1 \tag{1.1}$$

teste

**Proof 1.3.1** (Relative to Teorema 1.3.1)**.** *Lorem ipsum dolor sit amet, consectetuer adipiscing elit. Ut purus elit, vestibulum ut, placerat ac, adipiscing vitae, felis. Curabitur dictum gravida mauris.*

$$x^2 + e^{-\frac{x^2}{2}} = 1 \tag{1.2}$$

## 1.4 Lists

Lorem ipsum dolor sit amet, consectetuer adipiscing elit. Ut purus elit, vestibulum ut, placerat ac, adipiscing vitae, felis. Curabitur dictum gravida mauris.[1].

### 1.4.1 Numbered List

1. Lorem ipsum dolor sit amet, consectetuer adipiscing elit. Ut purus elit, vestibulum ut, placerat ac, adipiscing vitae, felis. Curabitur dictum gravida mauris..
2. Lorem ipsum dolor sit amet, consectetuer adipiscing elit. Ut purus elit, vestibulum ut, placerat ac, adipiscing vitae, felis. Curabitur dictum gravida mauris..
3. Lorem ipsum dolor sit amet, consectetuer adipiscing elit. Ut purus elit, vestibulum ut, placerat ac, adipiscing vitae, felis. Curabitur dictum gravida mauris..

### 1.4.2 Bullet Points

- Lorem ipsum dolor sit amet, consectetuer adipiscing elit. Ut purus elit, vestibulum ut, placerat ac, adipiscing vitae, felis. Curabitur dictum gravida mauris..

[1] Footnote example...

- Lorem ipsum dolor sit amet, consectetuer adipiscing elit. Ut purus elit, vestibulum ut, placerat ac, adipiscing vitae, felis. Curabitur dictum gravida mauris..
- Lorem ipsum dolor sit amet, consectetuer adipiscing elit. Ut purus elit, vestibulum ut, placerat ac, adipiscing vitae, felis. Curabitur dictum gravida mauris..

### 1.4.3 Descriptions and Definitions

**Name** Lorem ipsum dolor sit amet, consectetuer adipiscing elit. Ut purus elit, vestibulum ut, placerat ac, adipiscing vitae, felis. Curabitur dictum gravida mauris..

**Word** Lorem ipsum dolor sit amet, consectetuer adipiscing elit. Ut purus elit, vestibulum ut, placerat ac, adipiscing vitae, felis. Curabitur dictum gravida mauris..

**Comment** Lorem ipsum dolor sit amet, consectetuer adipiscing elit. Ut purus elit, vestibulum ut, placerat ac, adipiscing vitae, felis. Curabitur dictum gravida mauris..

# Parte II

# Enviroments

CAPÍTULO

2

# In-text Elements

## 2.1 Boxs

This section shows a set of enviroments that pertain to the family of theorem box. These can be the **theorem**, **definition**, **exercise**, **example** and **proofraw** enviroment

### 2.1.1 Theorems

We can reference the Theorem 2.1.1 and 2.1.2. This is an example of theorem.

```
\begin{theorem}
\label{theo:A}
\lipsum[1][1-3]
\begin{equation}
x^2+e^{-\frac{x^2}{2}}=1
\end{equation}
\end{theorem}
```

The last code generates the next theorem.

**THEOREM 2.1.1**

Lorem ipsum dolor sit amet, consectetuer adipiscing elit. Ut purus elit, vestibulum ut, placerat ac, adipiscing vitae, felis. Curabitur dictum gravida mauris.

$$x^2+e^{-\frac{x^2}{2}}=1 \tag{2.1}$$

```
\begin{theorem}[Theorem name]
\label{theo:E}
\lipsum[1][1-3]
\begin{equation}
x^2+e^{-\frac{x^2}{2}}=1
\end{equation}
\end{theorem}
```

**THEOREM 2.1.2** **Theorem name**

Lorem ipsum dolor sit amet, consectetuer adipiscing elit. Ut purus elit, vestibulum ut, placerat ac, adipiscing vitae, felis. Curabitur dictum gravida mauris.

$$x^2+e^{-\frac{x^2}{2}}=1 \tag{2.2}$$

### 2.1.2 Lemma

We can reference the Lemma 2.1.1 and 2.1.2. This is an example of lemma.

```
\begin{lemma}
\label{theo:A}
\lipsum[1][1-3]
\begin{equation}
x^2+e^{-\frac{x^2}{2}}=1
\end{equation}
\end{lemma}
```

The last code generates the next lemma.

**LEMMA 2.1.1**

Lorem ipsum dolor sit amet, consectetuer adipiscing elit. Ut purus elit, vestibulum ut, placerat ac, adipiscing vitae, felis. Curabitur dictum gravida mauris.

$$x^2+e^{-\frac{x^2}{2}}=1 \tag{2.3}$$

```
\begin{lemma}[Lemma name]
\label{theo:E}
\lipsum[1][1-3]
\begin{equation}
x^2+e^{-\frac{x^2}{2}}=1
\end{equation}
\end{lemma}
```

**LEMMA 2.1.2**

**Lemma name**

Lorem ipsum dolor sit amet, consectetuer adipiscing elit. Ut purus elit, vestibulum ut, placerat ac, adipiscing vitae, felis. Curabitur dictum gravida mauris.

$$x^2+e^{-\frac{x^2}{2}}=1 \tag{2.4}$$

### 2.1.3 Proof

This is an example of theorem proof.

```
\begin{proofraw}%
[Relative to Teorema \ref{theo:A}]
\lipsum[1][1-3]
\begin{equation}
x^2+e^{-\frac{x^2}{2}}=1
\end{equation}
\end{proofraw}
```

The last code gnerates the next proof.

**Proof 2.1.1** (Relative to Teorema 2.1.1)**.** *Lorem ipsum dolor sit amet, consectetuer adipiscing elit. Ut purus elit, vestibulum ut, placerat ac, adipiscing vitae, felis. Curabitur dictum gravida mauris.*

$$x^2+e^{-\frac{x^2}{2}}=1 \tag{2.5}$$

### 2.1.4 Exercises

We can reference the Exercises 2.1.1 and 2.1.2. This is an example of exercise.

```
\begin{exercise}[Exercise name A]
\label{exer:A}
\lipsum[1][1-3]
\begin{equation}
x^2+e^{-\frac{x^2}{2}}=1
\end{equation}
\end{exercise}
```

The last code generates the next exercise.

**Exercise name A**

**Exercício 2.1.1:** Lorem ipsum dolor sit amet, consectetuer adipiscing elit. Ut purus elit, vestibulum ut, placerat ac, adipiscing vitae, felis. Curabitur dictum gravida mauris.

$$x^2+e^{-\frac{x^2}{2}}=1 \tag{2.6}$$

This is an example of exercise without title.

```
\begin{exercise}
\label{exer:B}
\lipsum[1][1-3]
\begin{equation}
x^2+e^{-\frac{x^2}{2}}=1
\end{equation}
\end{exercise}
```

The last code generates the next exercise.

**Exercício 2.1.2:** Lorem ipsum dolor sit amet, consectetuer adipiscing elit. Ut purus elit, vestibulum ut, placerat ac, adipiscing vitae, felis. Curabitur dictum gravida mauris.

$$x^2+e^{-\frac{x^2}{2}}=1 \tag{2.7}$$

### 2.1.5 Examples

We can reference the Examples 2.1.1 and 2.1.2. This is an example of example box.

```
\begin{example}[Example name]
\label{exam:A}
\lipsum[1][1-3]
\begin{equation}
x^2+e^{-\frac{x^2}{2}}=1
\end{equation}
\end{example}
```

The last code generates the next exercise.

**Example 2.1.1 - Example name:** Lorem ipsum dolor sit amet, consectetuer adipiscing elit. Ut purus elit, vestibulum ut, placerat ac, adipiscing vitae, felis. Curabitur dictum gravida mauris.

$$x^2+e^{-\frac{x^2}{2}}=1 \tag{2.8}$$

This is an example of example box without title.

```
\begin{example}
\label{exam:B}
\lipsum[1][1-3]
\begin{equation}
x^2+e^{-\frac{x^2}{2}}=1
\end{equation}
\end{example}
```

The last code generates the next exercise.

❐ **Example 2.1.2:** Lorem ipsum dolor sit amet, consectetuer adipiscing elit. Ut purus elit, vestibulum ut, placerat ac, adipiscing vitae, felis. Curabitur dictum gravida mauris.

$$x^2+e^{-\frac{x^2}{2}}=1 \tag{2.9}$$

### 2.1.6 Definitions

Definition 2.1.1,

```
\begin{definition}[Definition name]
\label{def:A0}
\lipsum[1][1-3]
\begin{equation}
x^2+e^{-\frac{x^2}{2}}=1
\end{equation}
\end{definition}
```

❐ **Definition 2.1.1 - Definition name:** Lorem ipsum dolor sit amet, consectetuer adipiscing elit. Ut purus elit, vestibulum ut, placerat ac, adipiscing vitae, felis. Curabitur dictum gravida mauris.

$$x^2+e^{-\frac{x^2}{2}}=1 \tag{2.10}$$

### 2.1.7 Notations

Notations 2.1.1 and 2.1.2

```
\begin{notation}[Notation name title very large]
\label{not:A}
\lipsum[1][1-3]
\begin{equation}
x^2+e^{-\frac{x^2}{2}}=1
\end{equation}
\end{notation}
```

**Notation name title very large**

❒ **Notation 2.1.1:** Lorem ipsum dolor sit amet, consectetuer adipiscing elit. Ut purus elit, vestibulum ut, placerat ac, adipiscing vitae, felis. Curabitur dictum gravida mauris.

$$x^2+e^{-\frac{x^2}{2}}=1 \tag{2.11}$$

```
\begin{notation}
\label{not:B}
\lipsum[1][1-3]
\begin{equation}
x^2+e^{-\frac{x^2}{2}}=1
\end{equation}
\end{notation}
```

❒ **Notation 2.1.2:** Lorem ipsum dolor sit amet, consectetuer adipiscing elit. Ut purus elit, vestibulum ut, placerat ac, adipiscing vitae, felis. Curabitur dictum gravida mauris.

$$x^2+e^{-\frac{x^2}{2}}=1 \tag{2.12}$$

## 2.2 Equationbox

```
\begin{equationbox}
\begin{equation}
x^2+e^{-\frac{x^2}{2}}=1
\end{equation}
\end{equationbox}
```

$$x^2+e^{-\frac{x^2}{2}}=1 \tag{2.13}$$

## 2.3 Phrasebox

```
\begin{phrasebox}{Frase title}{Fernando P. R.}
\lipsum[1][1-3]
\end{phrasebox}
```

**Frase 2.3.1: Frase title**

Lorem ipsum dolor sit amet, consectetuer adipiscing elit. Ut purus elit, vestibulum ut, placerat ac, adipiscing vitae, felis. Curabitur dictum gravida mauris.

Fernando P. R.

## 2.4 Attentionbox

Lorem ipsum dolor sit amet, consectetuer adipiscing elit. Ut purus elit, vestibulum ut, placerat ac, adipiscing vitae, felis. Curabitur dictum gravida mauris.

```
\begin{attentionbox}
\lipsum[1][1-3]
\end{attentionbox}
```

Lorem ipsum dolor sit amet, consectetuer adipiscing elit. Ut purus elit, vestibulum ut, placerat ac, adipiscing vitae, felis. Curabitur dictum gravida mauris.

## 2.5 Informationbox

Lorem ipsum dolor sit amet, consectetuer adipiscing elit. Ut purus elit, vestibulum ut, placerat ac, adipiscing vitae, felis. Curabitur dictum gravida mauris.

```
\begin{informationbox}[Título A]
\lipsum[1][1-3]
\end{informationbox}
```

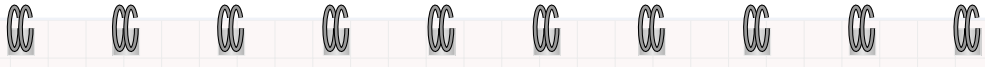
**Título A:** Lorem ipsum dolor sit amet, consectetuer adipiscing elit. Ut purus elit, vestibulum ut, placerat ac, adipiscing vitae, felis. Curabitur dictum gravida mauris.

## 2.6 Elaborationbox

The next code show how to use the `elaborationbox` enviroment with title.

```
\begin{elaborationbox}[Title of elaborationbox]
\lipsum[1][1-6]
\end{elaborationbox}
```

The result can be seen in the next `elaborationbox`.



**Elaboração 2.6.1: Title of elaborationbox**

Lorem ipsum dolor sit amet, consectetuer adipiscing elit. Ut purus elit, vestibulum ut, placerat ac, adipiscing vitae, felis. Curabitur dictum gravida mauris. Nam arcu libero, nonummy eget, consectetuer id, vulputate a, magna. Donec vehicula augue eu neque. Pellentesque habitant morbi tristique senectus et netus et malesuada fames ac turpis egestas.

The next code show how to use the `elaborationbox` enviroment without title.

```
\begin{elaborationbox}
\lipsum[1][1-6]
\end{elaborationbox}
```

The result can be seen in the next `elaborationbox`.

Lorem ipsum dolor sit amet, consectetuer adipiscing elit. Ut purus elit, vestibulum ut, placerat ac, adipiscing vitae, felis. Curabitur dictum gravida mauris. Nam arcu libero, nonummy eget, consectetuer id, vulputate a, magna. Donec vehicula augue eu neque. Pellentesque habitant morbi tristique senectus et netus et malesuada fames ac turpis egestas.

## 2.7 Notebox

```
\begin{notebox}
\lipsum[1][1-3]
\end{notebox}
```

Lorem ipsum dolor sit amet, consectetuer adipiscing elit. Ut purus elit, vestibulum ut, placerat ac, adipiscing vitae, felis. Curabitur dictum gravida mauris.

## 2.8 Bullet journal

### 2.8.1 Bulletjournalitem

Lorem ipsum dolor sit amet, consectetuer adipiscing elit. Ut purus elit, vestibulum ut, placerat ac, adipiscing vitae, felis. Curabitur dictum gravida mauris.

```
\begin{bulletjournalitem}
\tcbitem \lipsum[1][1-3]
\tcbitem \lipsum[1][2-4]
\tcbitem \lipsum[1][3-5]
\end{bulletjournalitem}
```

Lorem ipsum dolor sit amet, consectetuer adipiscing elit. Ut purus elit, vestibulum ut, placerat ac, adipiscing vitae, felis. Curabitur dictum gravida mauris.

Ut purus elit, vestibulum ut, placerat ac, adipiscing vitae, felis. Curabitur dictum gravida mauris. Nam arcu libero, nonummy eget, consectetuer id, vulputate a, magna.

Curabitur dictum gravida mauris. Nam arcu libero, nonummy eget, consectetuer id, vulputate a, magna. Donec vehicula augue eu neque.

### 2.8.2 Bulletjournalpicture

Lorem ipsum dolor sit amet, consectetuer adipiscing elit. Ut purus elit, vestibulum ut, placerat ac, adipiscing vitae, felis. Curabitur dictum gravida mauris.

```
\begin{bulletjournalpicture}[black]
\tcbitem \lipsum[1][1-3]
\tcbitem \lipsum[1][2-4]
\tcbitem \lipsum[1][3-5]
\end{bulletjournalpicture}
```

1 Lorem ipsum dolor sit amet, consectetuer adipiscing elit. Ut purus elit, vestibulum ut, placerat ac, adipiscing vitae, felis. Curabitur dictum gravida mauris.

2 Ut purus elit, vestibulum ut, placerat ac, adipiscing vitae, felis. Curabitur dictum gravida mauris. Nam arcu libero, nonummy eget, consectetuer id, vulputate a, magna.

3 Curabitur dictum gravida mauris. Nam arcu libero, nonummy eget, consectetuer id, vulputate a, magna. Donec vehicula augue eu neque.

### 2.8.3 Bulletjournalarrow

Lorem ipsum dolor sit amet, consectetuer adipiscing elit. Ut purus elit, vestibulum ut, placerat ac, adipiscing vitae, felis. Curabitur dictum gravida mauris.

```
\begin{bulletjournalarrow}[black]
\tcbitem First line of text.
\tcbitem Second line of text.
```

```
\end{bulletjournalarrow}
```

1 First line of text.
2 Second line of text.

### 2.8.4 Bulletjournalround

```
\begin{bulletjournalround}[colorNotation]
\tcbitem First line of text.
\tcbitem Second line of text.
\end{bulletjournalround}
```

1 First line of text.
2 Second line of text.

Lorem ipsum dolor sit amet, consectetuer adipiscing elit. Ut purus elit, vestibulum ut, placerat ac, adipiscing vitae, felis. Curabitur dictum gravida mauris.

```
\begin{notation}[Notation name title very large]
Text before bulletjournalround enviroment.
\begin{bulletjournalround}[colorNotation]
\tcbitem First line of text.
\tcbitem Second line of text.
\end{bulletjournalround}
Text out of bulletjournalround enviroment.
\end{notation}
```

**Notation name title very large**

❒ **Notation 2.8.1:** Text before bulletjournalround enviroment.

1 First line of text.
2 Second line of text.

Text out of bulletjournalround enviroment.

CAPÍTULO

3

# Presenting Information

Lorem ipsum dolor sit amet, consectetuer adipiscing elit. Ut purus elit, vestibulum ut, placerat ac, adipiscing vitae, felis. Curabitur dictum gravida mauris. Nam arcu libero, nonummy eget, consectetuer id, vulputate a, magna. Donec vehicula augue eu neque. Pellentesque habitant morbi tristique senectus et netus et malesuada fames ac turpis egestas. Mauris ut leo. Cras viverra metus rhoncus sem. Nulla et lectus vestibulum urna fringilla ultrices. Phasellus eu tellus sit amet tortor gravida placerat. Integer sapien est, iaculis in, pretium quis, viverra ac, nunc. Praesent eget sem vel leo ultrices bibendum. Aenean faucibus. Morbi dolor nulla, malesuada eu, pulvinar at, mollis ac, nulla. Curabitur auctor semper nulla. Donec varius orci eget risus. Duis nibh mi, congue eu, accumsan eleifend, sagittis quis, diam. Duis eget orci sit amet orci dignissim rutrum.

## 3.1 Table

Lorem ipsum dolor sit amet, consectetuer adipiscing elit. Ut purus elit, vestibulum ut, placerat ac, adipiscing vitae, felis. Curabitur dictum gravida mauris. Nam arcu libero, nonummy eget, consectetuer id, vulputate a, magna. Donec vehicula augue eu neque. Pellentesque habitant morbi tristique senectus et netus et malesuada fames ac turpis egestas. Mauris ut leo. Cras viverra metus rhoncus sem. Nulla et lectus vestibulum urna fringilla ultrices. Phasellus eu tellus sit amet tortor gravida placerat. Integer sapien est, iaculis in, pretium quis, viverra ac, nunc. Praesent eget sem vel leo ultrices bibendum. Aenean faucibus. Morbi dolor nulla, malesuada eu, pulvinar at, mollis ac,

nulla. Curabitur auctor semper nulla. Donec varius orci eget risus. Duis nibh mi, congue eu, accumsan eleifend, sagittis quis, diam. Duis eget orci sit amet orci dignissim rutrum. Lorem ipsum dolor sit amet, consectetuer adipiscing elit. Ut purus elit, vestibulum ut, placerat ac, adipiscing vitae, felis. Curabitur dictum gravida mauris.

```
\begin{table}[h]
\centering
\begin{tabular}{l l l}
\toprule
\textbf{Treat.} &
\textbf{Resp. 1} &
\textbf{Resp. 2}\\
\midrule
Treatment 1 & 0.0003262 & 0.562 \\
Treatment 2 & 0.0015681 & 0.910 \\
Treatment 3 & 0.0009271 & 0.296 \\
\bottomrule
\end{tabular}
\caption{Table caption}
\end{table}
```

| **Treat.** | **Resp. 1** | **Resp. 2** |
|---|---|---|
| Treatment 1 | 0.0003262 | 0.562 |
| Treatment 2 | 0.0015681 | 0.910 |
| Treatment 3 | 0.0009271 | 0.296 |

Tabela 3.1: Table caption

## 3.2 Figure

Lorem ipsum dolor sit amet, consectetuer adipiscing elit. Ut purus elit, vestibulum ut, placerat ac, adipiscing vitae, felis. Curabitur dictum gravida mauris. Nam arcu libero, nonummy eget, consectetuer id, vulputate a, magna. Donec vehicula augue eu neque. Pellentesque habitant morbi tristique senectus et netus et malesuada fames ac turpis

egestas. Mauris ut leo. Cras viverra metus rhoncus sem. Nulla et lectus vestibulum urna fringilla ultrices. Phasellus eu tellus sit amet tortor gravida placerat. Integer sapien est, iaculis in, pretium quis, viverra ac, nunc. Praesent eget sem vel leo ultrices bibendum. Aenean faucibus. Morbi dolor nulla, malesuada eu, pulvinar at, mollis ac, nulla. Curabitur auctor semper nulla. Donec varius orci eget risus. Duis nibh mi, congue eu, accumsan eleifend, sagittis quis, diam. Duis eget orci sit amet orci dignissim rutrum.

```
\begin{figure}[h]
\centering
\includegraphics[width=0.3\textwidth]
{placeholder.jpg}
\caption{Figure caption}
\end{figure}
```

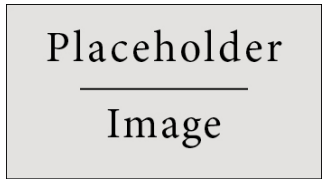



Figura 3.1: Figure caption

Search image files in directory: ./pictures

# Parte III

# Macros

CAPÍTULO

4

# Macros

## 4.1 File math-macros.tex

```
\begin {equation}
\FuncOf {f}{x}
\end {equation}
```

$$f(x) \tag{4.1}$$

```
\begin {equation}
\MinOf {x}{f(x)}
\end {equation}
```

$$\min_{x} f(x) \tag{4.2}$$

```
\begin {equation}
\ArgMin {x}{f(x)}
\end {equation}
```

$$\arg_x \min f(x) \tag{4.3}$$

```
\begin {equation}
\ArgMinDef {x}{f}
\end {equation}
```

$$\arg_x \min f\left(x\right) = \left\{ x | f\left(x\right) = \min_{x'} f\left(x'\right) \right\} \tag{4.4}$$

```
\begin {equation}
\EigenSet {A}{v}{\lambda }
\end {equation}
```

$$\{v, \lambda | Av = \lambda v\} \tag{4.5}$$

```
\begin {equation}
\InnerProd {x}{y}
\end {equation}
```

$$\langle x, y \rangle \tag{4.6}$$

```
\begin {equation}
\Norm {x}
\end {equation}
```

$$\| x \| \tag{4.7}$$

```
\begin {equation}
\Cardinality {x}
\end {equation}
```

$$\operatorname{card}(x) \tag{4.8}$$

```
\begin {equation}
\DiagFunc {x}
\end {equation}
```

$$\operatorname{diag}(x) \tag{4.9}$$

```
\begin {equation}
\Vector {x}
\end {equation}
```

$$\mathbf{x} \tag{4.10}$$

```
\begin {equation}
\Matrix {x}
\end {equation}
```

$$\mathbf{X} \tag{4.11}$$

```
\begin {equation}
\DtVector {x}
\end {equation}
```

$$\dot{\mathbf{x}} \tag{4.12}$$

```
\begin {equation}
\DDtVector {x}
\end {equation}
```

$$\ddot{\mathbf{x}} \tag{4.13}$$

```
\begin {equation}
\DtMatrix {x}
\end {equation}
```

$$\dot{\mathbf{X}} \tag{4.14}$$

```
\begin {equation}
\DDtMatrix {x}
\end {equation}
```

$$\ddot{\mathbf{X}} \tag{4.15}$$

```
\begin {equation}
\DPartial {y}{x}
\end {equation}
```

$$\frac{\partial y}{\partial x} \tag{4.16}$$

```
\begin {equation}
\DDPartial {y}{x}
\end {equation}
```

$$\frac{\partial^2 y}{\partial x^2} \tag{4.17}$$

```
\begin {equation}
\DDPartialXY {z}{x}{y}
\end {equation}
```

$$\frac{\partial^2 z}{\partial x \partial y} \tag{4.18}$$

# Parte IV

# Referencias

# Bibliografia


[Smi12] John Smith. *Book title*. 1ª edição. Volume 3. 2. City: Publisher, jan. de 2012, páginas 123–200 (ver página 4).

[Smi13] James Smith. “Article title”. Em: 14.6 (mar. de 2013), páginas 1–8 (ver página 4).

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