Université de Montréal

Title of the thesis

par

Name of the student

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SOMMAIRE

Sommaire et mots-clés français...

SUMMARY

English summary and keywords...

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LIST OF TABLES

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DÉDICACES

Vos dédicaces.

ACKNOWLEDGEMENTS

I would like to thank...

INTRODUCTION

In this example thesis, we will introduce the `dms` template. Scroll down for more!

Chapter 1

FIRST CHAPTER

The 1st chapter with a number. In english, titles take a capital letter for most words. In french, only the first word has a capital letter. There is important commande to *emphasis* somethine in the text, such as emphasis, in this sentence. The emphasising author should use the command `\emph`. There are other commands, or macro, to that give the *illusion* that the author emphasised something, they are `\textit` and `\textbf`. Conceptually, these should not be used to emphasize. They should be used, for example, to quote :

"*Wir müssen wissen. Wir werden wissen*"

~ David Hilbert

1.1. Section of the First Chapter

The first section. Is this not exciting!

1.1.1. Subsection also

Subsections are useful for a complex, structured text. However, sometimes it is better to combine a few subsections together into a large section.

This subsection has the following table.

Table 1. I. A simple table in the first chapter.

Option	g	c	d	`p{0.4\textwidth}`
Effet	À gauche	Au centre	À droite	Le texte de cette colonne est justifié et la largeur de la colonne est fixée à 40 % de la zone de texte (hors tableau).

The table 1. I is a bit sparse.

1.1.1.1. *Subsubsection, the First*

More text...

1.1.2. Subsection Two

Even more text...

Chapter 2

SOME EXAMPLES

Here are some simple examples.

2.1. Enumerations

This is a showcase of an enumaration :

1. a item 1
2. b item 2
3. c item 3

Here is an example of list. There are no numbers to the items

- Default;
- `$\bullet$`;
- ⋆ `$\star$`.

2.2. Mathematical Equations

An equation :

$$\otimes^n \mathbb{C}^2 \cong \bigoplus_{m=-n/2}^{n/2} W_m.$$

Another one, with numbers :

$$\frac{\partial \mathcal{L}}{\partial \phi^a} - \partial_\mu \frac{\partial \mathcal{L}}{\partial(\partial_\mu \phi^a)} = 0, \qquad \mu = 0, 1, 2, 3. \tag{2.2.1}$$

The previous equations (2.2.1) are called *Euler-Lagrange equations*. In the following computations,

$$\begin{aligned} \delta S &= \int_\Omega \mathrm{d}^d x \, \mathcal{L}\Big(\phi'^a(x), \partial_\mu \phi'^a(x)\Big) - \int_\Omega \mathrm{d}^d x \, \mathcal{L}\Big(\phi^a(x), \partial_\mu \phi^a(x)\Big) \\ &= \int_\Omega \mathrm{d}^d x \, \left[\delta\phi^a \frac{\partial \mathcal{L}}{\partial \phi^a} + \partial_\mu \delta\phi^a \frac{\partial \mathcal{L}}{\partial(\partial_\mu \phi^a)}\right] \end{aligned}$$

$$= \int_\Omega \mathrm{d}^d x \left[(\delta\phi^a \frac{\partial \mathcal{L}}{\partial \phi^a} + \partial_\mu \left(\delta\phi^a \frac{\partial \mathcal{L}}{\partial(\partial_\mu \phi^a)} \right) - \delta\phi^a \partial_\mu \frac{\partial \mathcal{L}}{\partial(\partial_\mu \phi^a)} \right]$$
$$= 0,$$

there are no numbered lines. While the last line of the next one is numbered:

$$\begin{aligned} \delta S &= \int_{\Omega'} \mathrm{d}^d x' \, \mathcal{L}\Big(\phi'^a(x'), \partial'_\mu \phi'^a(x')\Big) - \int_\Omega \mathrm{d}^d x \, \mathcal{L}\Big(\phi^a(x), \partial_\mu \phi^a(x)\Big) \\ &= \int_\Omega \mathrm{d}^d x \left[\bar{\delta}\phi^a \frac{\partial \mathcal{L}}{\partial \phi^a} + \partial_\mu \bar{\delta}\phi^a \frac{\partial \mathcal{L}}{\partial(\partial_\mu \phi^a)} \right] + \int_{\partial\Omega} \mathrm{d}\sigma_\mu \, \mathcal{L}\Big(\phi^a, \partial_\mu \phi^a\Big) \delta x^\mu \\ &= \int_\Omega \mathrm{d}^d x \, \partial_\mu \mathcal{J}^\mu(x). \end{aligned} \tag{2.2.2}$$

2.3. Definitions, Theorem and Proofs

This is a definition. Maybe?

Definition 2.1 (La définition)**.** *The definition.*

Now a theorem.

Theorem 2.1 (Titre)**.** *This is true!*

Proof. With the proof. □

2.4. To construct a table

Table 2. I. A simple table

Option	g	c	d	`p{0.4\textwidth}`
Effet	On the left	Centered	On the right	This column has justified text and the width is fixed at 40 % of the page width.

This table 2. I is also sparse.

2.5. Reference to the Bibliography

The documents by [2, 1] and [4] are great reference for LaTeX. The manuel by [1] is probably the most popular.

The article of [3] is quite the voyage.

The bibitem of the `.bib` file that are not `\cite`'d in the text are not added to the bibliography.

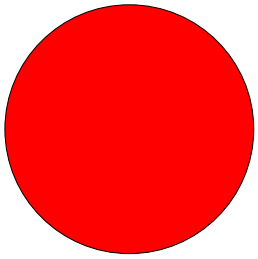
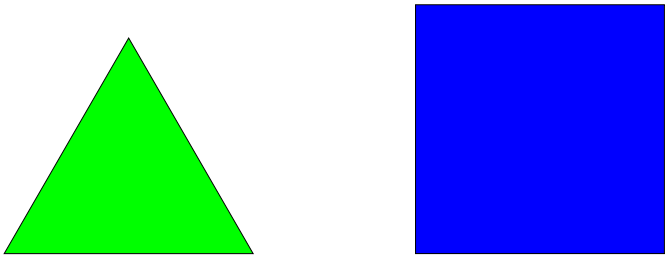


FIGURE 2.1. Ein Kreis[r].



(a) Ein Dreieck[s]. (b) Ein Quadrat[s].

FIGURE 2.2. A square and a triagle.

2.6. INSERTING IMAGES

The image 2.1 is a *circle*. In figure 2.2, the triangle (a) and the square (b) are placed side by side with the macro `\subfigure`.

BIBLIOGRAPHY

[1] M. Goossens, F. Mittelbach, and A. Samarin. *The LaTeX companion*. New-York, 1994.

[2] L. Lamport. *LaTeX – A Document Preparation System*. Reading, 1986.

[3] P.P. Martin. On Schur-Weyl duality, A_n Hecke algebras and quantum $\mathfrak{sl}(N)$ on $\otimes^{n+1}\mathbb{C}^N$. *Int. J. Mod. Phys. A*, 7:645–673, 1992.

[4] M. D. Spivak. *The Joy of TeX*. Providence, second edition, 1990.