

The Title of the Thesis

The Lab Name / Subtitle Goes Here

Author Name

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by

Author Name

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1

Introduction

This chapter summarizes the extra features available in this template.

1.1 Packages included

When first importing this template (during `#import "@preview/modern-epfl-thesis:0.1.0": *`) at the top of `main.typ`, several imports occur. These are:

- `wrap-it`, version 0.1.1. The function here are used, and slightly modified for proper caption sizing.
- `equate`, version 0.3.2. Is imported to enable multi-line equation numbering out of the box, and sets the defaults `show: equate.with(breakable: false, sub-numbering: false)`. For more information, please visit the documentation of `equate`.

In addition to these “included” imports, at the top of `main.typ`, the following packages are also imported:

```
// Physics-related tools for equations
#import "@preview/physica:0.9.6": *
// Specifying quantities and units
#import "@preview/unify:0.7.1": num, numrange, qty, qtyparange
// Formatting of uncertainties
#import "@preview/zero:0.5.0"
```

For more imformation on these packages, please consult their documentation.

1.2 Equations

Here follows a small overview of equation-related behaviour in this template.

For example, here is a new paragraph containing two aligned equations:

$$e^{\pi i} = -1 \tag{1.1}$$

$$(n+1)! = \int_0^\infty t^n e^{-t} dt \tag{1.2}$$

Here Eq. (1.1) is Euler’s formula, and Eq. (1.2) is Cauchy’s formula for a factorial. Note that the ability to refer to them individually is via the `equate` package. Additionally, here is a single-lined equation:

$$a^2 + b^2 = c^2 \tag{1.3}$$

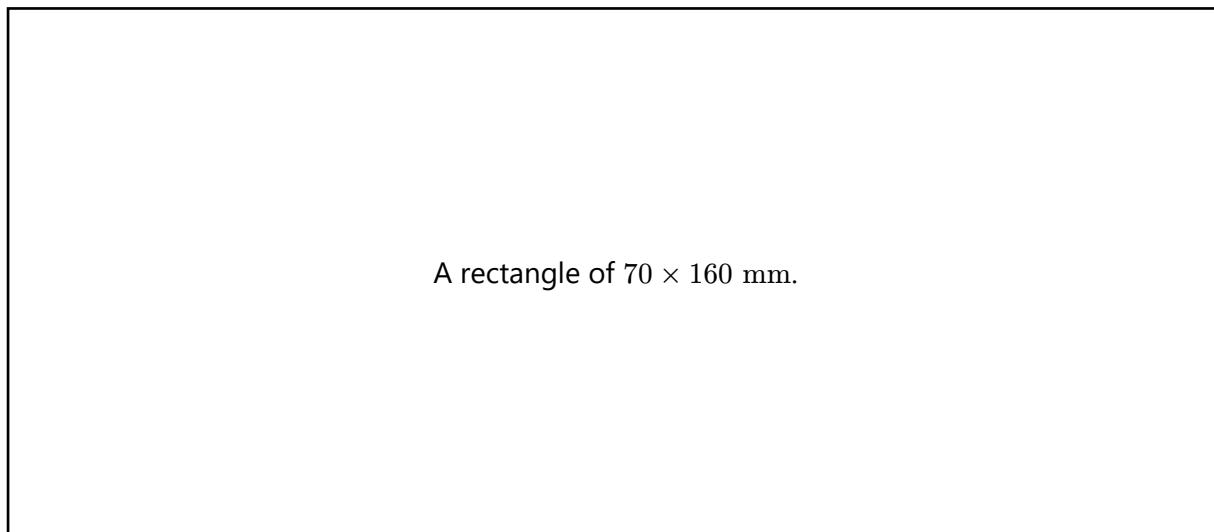
To specify quantities (with units) and uncertainties, please refer to the `unify` and `zero` packages.

1.3 Page layout

The page layout is set as A4, with margins of 25 mm. As an A4 page is 210 mm wide, full-width figures should be at most 160 mm wide. Each page that is not the start of a chapter has a header, containing the current chapter name on the left in ALLCAPS font, and your name on the right side of the header. The bottom of the page contains the page number, which uses lowercase roman numerals in the front matter, and arabic numerals for the main text.

1.4 Floating elements

Tables and images can be inserted into the document via the `#figure` function. Here follow some examples, which are Figure 1 and Figure 2. Please check out the source code of this text to understand how.



A rectangle of 70×160 mm.

Figure 1: An example of a large figure. Full-width figures should be 160 mm wide.

For smaller figures, it is also possible wrap them within text. For example, Figure 2. Below, a small table can be found. Note the alignment of the decimal columns achieved via the `zero` package.

 Lorem ipsum dolor sit amet, consectetur adipisci-
 cing elit, sed do eiusmod tempor incididunt
 ut labore et dolore magna aliquam quaerat
 voluptatem. Ut enim aequo doleamus animo,
 cum corpore dolemus, fieri tamen permagna
 accessio potest, si aliquod aeternum et infini-
 tum impendere malum nobis opinemur. Quod
 idem licet transferre in voluptatem, ut postea variari voluptas distingue possit, augeri ampli-
 ficarique non possit. At.



Figure 2: An example of a small figure.
Illustration by karem adem on Unsplash.

Table 1: A small table.

A	B
1.0	2.0
10.0	0.35



(a) An image of the andromeda galaxy.



(b) A sunset illuminating the sky above a mountain range.

Figure 3: A figure composed of two sub figures.

Above in Figure 3, we see a figure which is composed of two other figures, namely Figure 3a and Figure 3b.

1.5 Referencing stuff

Tables, Figures and Equations are numbered by section. When referring to one of these items, the number becomes green (color is customizable). For example, this is Section 1.5 and the afterwards we have Section 1.5.1. For figures, it is possible to attach an additional supplement to a figure, for example Figure 1 could have subpanels like a 1, which you can specify via `@fig:label[a]`.

References are formatted as [1]. Several references are joined according to [2], [3], [4].

1.5.1 Chemical formula

Here is a chemical formula: H_2O . This works via a simple function `#chem` which subscripts all numbers.

1.6 Fonts

The main font used in this template is `Stix Two Text, 11pt`, with equations typeset using `STIX Two Math`. The large headings for title, subtitle and name on the cover and title pages are typeset using `Roboto`. The big numbers in chapter titles are typeset using `Lora`. These fonts are included by default in the online typst editor, but should be installed when compiling locally. In addition, the main text and math fonts are customizable.

2

Full template example

Here follows a full example of how to use the template. This example is the same a what is specified in `main.typ` after initializing the template.

References

- [1] K. Yamanaka, T. Tsuji, A. Noguchi, T. Koike, and T. Mihara, 'Nanoscale elasticity measurement with in situ tip shape estimation in atomic force microscopy', *Review of Scientific Instruments*, vol. 71, no. 6, pp. 2403–2408, June 2000, doi: 10.1063/1.1150627.
- [2] R. Asmatulu and W. S. Khan, 'Characterization of electrospun nanofibers', *Synthesis and Applications of Electrospun Nanofibers*. Elsevier, pp. 257–281, 2019. doi: 10.1016/B978-0-12-813914-1.00013-4.
- [3] G. Binnig, C. F. Quate, and C. Gerber, 'Atomic Force Microscope', *Physical Review Letters*, vol. 56, no. 9, pp. 930–933, Mar. 1986, doi: 10.1103/PhysRevLett.56.930.
- [4] J. Boussinesq, *Application des potentiels à l'étude de l'équilibre et du mouvement des solides élastiques*. Gauthier-Villars, 1885. Accessed: Oct. 10, 2024. [Online]. Available: <https://gallica.bnf.fr/ark:/12148/bpt6k9651115r>

A

The first Appendix

B

The second Appendix