Semester Learning Portfolio

Alexander Schandorf Sumczynski

September 16, 2025

ABSTRACT

this is the apprsikt

Contents

1 Introduction

Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magnam aliquam quaerat.

2 Equations

2.1 leture one

The template uses `i-figured` for labeling equations. Equations will be numbered only if they are labelled. Here is an equation with a label:

$$\sum_{k=1}^{n} k = \frac{n(n+1)}{2} \tag{2.1}$$

We can reference it by `@eq:label` like this: (2.1), i.e., we need to prepend the label with `eq:`. The number of an equation is determined by the section it is in, i.e. the first digit is the section number and the second digit is the equation number within that section.

Here is an equation without a label:

$$\exp(x) = \sum_{n=0}^{\infty} \frac{x^n}{n!}$$

As we can see, it is not numbered.

3 Theorems

The template uses `great-theorems` for theorems. Here is an example of a theorem:

Theorem 3.1. (Example Theorem): *This is an example theorem.*

Proof. This is the proof of the example theorem. $\square$

We also provide `definition`, `lemma`, `remark`, `example`, and `question`s among others. Here is an example of a definition:

Definition 3.2. (Example Definition): *This is an example definition.*

Question **3.3.** (Custom mathblock?): How do you define a custom mathblock?

Answer 3.4. *You can define a custom mathblock like this:*

```
#let answer = my-mathblock(
  blocktitle: "Answer",
  bodyfmt: text.with(style: "italic"),
)
```

Similar as for the equations, the numbering of the theorems is determined by the section they are in. We can reference theorems by `@label` like this: Theorem 3.1.

To get a bibliography, we also add a citation [1].

Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magnam aliquam quaerat voluptatem. Ut enim aeque doleamus animo, cum corpore dolemus, fieri tamen permagna accessio potest, si aliquod aeternum et infinitum impendere malum nobis opinemur. Quod idem licet transferre in voluptatem, ut.

Bibliography

[1] J. W. Cooley and J. W. Tukey, "An Algorithm for the Machine Calculation of Complex Fourier Series," *Mathematics of Computation*, vol. 19, pp. 297–301, 1965, doi: 10.1090/S0025-5718-1965-0178586-1.

Appendix A

If you have appendices, you can add them after `#show: appendices`. The appendices are started with an empty heading = and will be numbered alphabetically. Any appendix can also have different subsections.

A.1 Appendix section

Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magnam aliquam quaerat voluptatem. Ut enim aeque doleamus animo, cum corpore dolemus, fieri tamen permagna accessio potest, si aliquod aeternum et infinitum impendere malum nobis opinemur. Quod idem licet transferre in voluptatem, ut postea variari voluptas distinguique possit, augeri amplificarique non possit. At etiam Athenis, ut e patre audiebam facete et urbane Stoicos irridente, statua est in quo a nobis philosophia defensa et collaudata est, cum id, quod maxime placeat, facere possimus, omnis voluptas assumenda est, omnis dolor repellendus. Temporibus autem quibusdam et.