# My Report

Emilia Dunfelt

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### Abstract

Here goes text

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#### 1. Introduction

Here is some text with math  $x^2 + y^2 = x^2$ , and also some display math;

$$(A \otimes B)(x_j \otimes y_q) = Ax_j \otimes By_q$$
$$= \left(\sum_i \alpha_{ij} x_i\right) \otimes \left(\sum_p \beta_{pq} y_q\right).$$

Next we have a numbered equation:

$$\sum_{i} \sum_{p} \alpha_{ij} \beta_{pq}(x_i \otimes y_p). \tag{1.0.1}$$

**§ 1.1.** A subsection. A subsection with some text as well, and a reference [1] (to an article) as well as to an equation: (1.0.1). We can also reference a section as follows: see section 1.

**Theorem 1.1** (Very important theorem). *This is an important theorem! Actually, it's Pythagoras theorem:* 

$$a^2 + b^2 = c^2$$

Which we of course immediately recognize!

Theorem 1.1 can be referenced later.

4 2. THE FINAL SECTION

### 2. The final section

Here is even more text!

# REFERENCES

[1] Portugal, R. 2022. Basic Quantum Algorithms. arXiv:2201.10574 [quant-ph]. (2022).