

# Continuous Error Correction in Quantum Dot Qubits

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## **Abstract**

Woop!

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## 0.1 Introduction

Test cite [1]

# Chapter 1

## Background

### 1.1 Quantum error correction

#### 1.1.1 Quantum computing

#### 1.1.2 Error correction

#### 1.1.3 Continuous error correction

### 1.2 Quantum Dot Qubits

#### 1.2.1 Semiconductor Heterostructures

#### The Hubbard Model

## Chapter 2

# Theory

2.1 Rapidly repeated error correction schemes

2.2 Truly continuous error correction in quantum dot systems

## Chapter 3

# Methods

3.1 Simulating the hubbard model

3.2 Truly continuous error correction prototype

## Chapter 4

# Discussion

### 4.1 Conclusions

# Bibliography

- [1] Albert Einstein. “Zur Elektrodynamik bewegter Körper. (German) [On the electrodynamics of moving bodies]”. In: *Annalen der Physik* 322.10 (1905), pp. 891–921. DOI: <http://dx.doi.org/10.1002/andp.19053221004>.



# Appendices

## .1 Locked states