### **Study Notes**

Author

December 3, 2020

### **Contents**

List of Figures	5
List of Theorems	7
List of Definitions	9
1 Preface 1.1 Features of this template	. 13
I Mathematics	15
2 Discrete Math 2.1 Proof	<b>17</b> . 17
II Computer Science	19
III Physics	21
Appendices	23
Appendix A Formulas  A.1 Gaussian distribution	. 23
Index	27

4 Contents

# **List of Figures**

1.1	Elliptic curves	 14

6 List of Figures

### **List of Theorems**

A.1	Theorem (Central limit theorem																											23
-----	--------------------------------	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	----

8 List of Theorems

### **List of Definitions**

A.1 Definition (Gaussian distribution)	23
----------------------------------------	----

10 List of Definitions

## List of Abbreviations and Symbols

 $\mathbb{R}$  Real number. 13

### **Chapter 1**

### **Preface**

#### 1.1 Features of this template

• different styles of clickable definitions and theorems

- nameref: Gaussian distribution

- autoref: Definition A.1

- cref: Definition A.1

- hyperref: Gaussian

• toc: list of theorems, definitions

• bib: titles of reference is linked to the publisher webpage [Kit+02] [Chi09]

• index index

• glossary  $\mathbb{R}$ 

14 Chapter 1. Preface

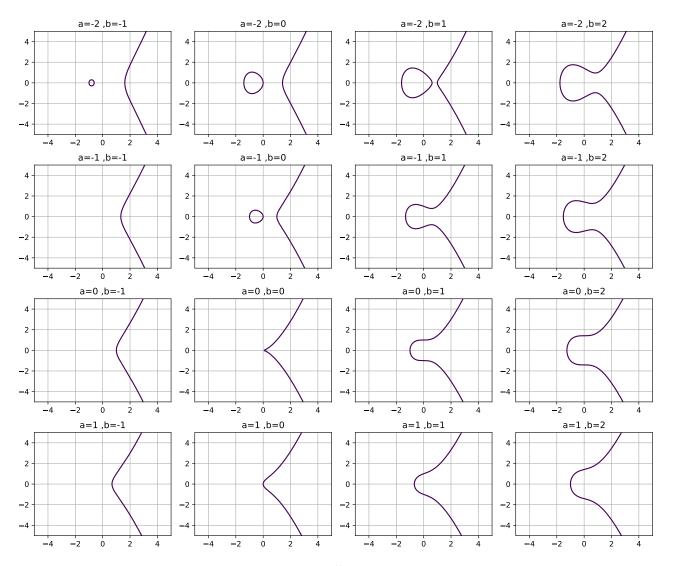


Figure 1.1: Elliptic curves

# Part I Mathematics

### **Chapter 2**

## **Discrete Math**

2.1 Proof

# Part II Computer Science

Part III

**Physics** 

### Appendix A

### **Formulas**

#### A.1 Gaussian distribution

Definition A.1 (Gaussian distribution). Gaussian distribution

**Theorem A.1** (Central limit theorem).

### **Bibliography**

- [Chi09] Andrew M. Childs. *Universal Computation by Quantum Walk*. Physical Review Letters 102.18 (May 4, 2009), p. 180501. arXiv: 0806.1972.
- [Kit+02] Alexei Yu Kitaev et al. *Classical and quantum computation*. 47. American Mathematical Soc., 2002.

26 Bibliography

### Index

Gaussian distribution, 23

index, 13