

QUANTUM INFORMATION & QUANTUM COMPUTATION

- A Quick Guide -

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Preface

Greetings,

This guide is based on *Quantum Computer Science, An Introduction* by N. David Mermin, and *Quantum Computation and Quantum Information* by Isaac Chuang and Michael Nielsen.

The entire copy of this text can be found in Chapter 4 of *Quantum Theories, A Quick Guide to*. While this text fits under the more general title of *quantum theories*, the topics covered here are no longer physical phenomena as explained by quantum theories. Rather, we will pay much attention to what happens when computation and information theory meets a touch of quantumness. This guide thus deserves its status as a separate set of notes.

In any case, enjoy!

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Part 1

The Game

1.1 Quantum computer

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