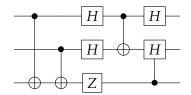CS 410/510 Introduction to Quantum Computing

Lecture 1

Portland State U, Spring 2017
April 4, 2017
Lecturer: Fang Song
Scribe: your name

Draw quantum circuits using the `qcircuit` package

Instructions on github (`https://github.com/CQuIC/qcircuit`). A simple example here:

1 Syllabus

2 A probabilistic model

3 Quantum theory: probabilistic model extended

Postulates of quantum mechanics

1. Quantum superposition principle. Qubit and extension to composite systems (multiple qubits).

2. Measurement.

3. Unitary operations.

4 Dirac notation