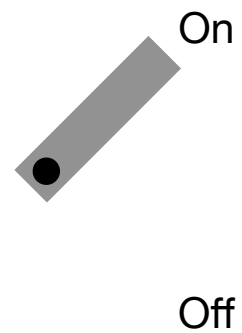# Spoiler - What makes (b)it quantum?

q-edu-lab.com

As we imagine it

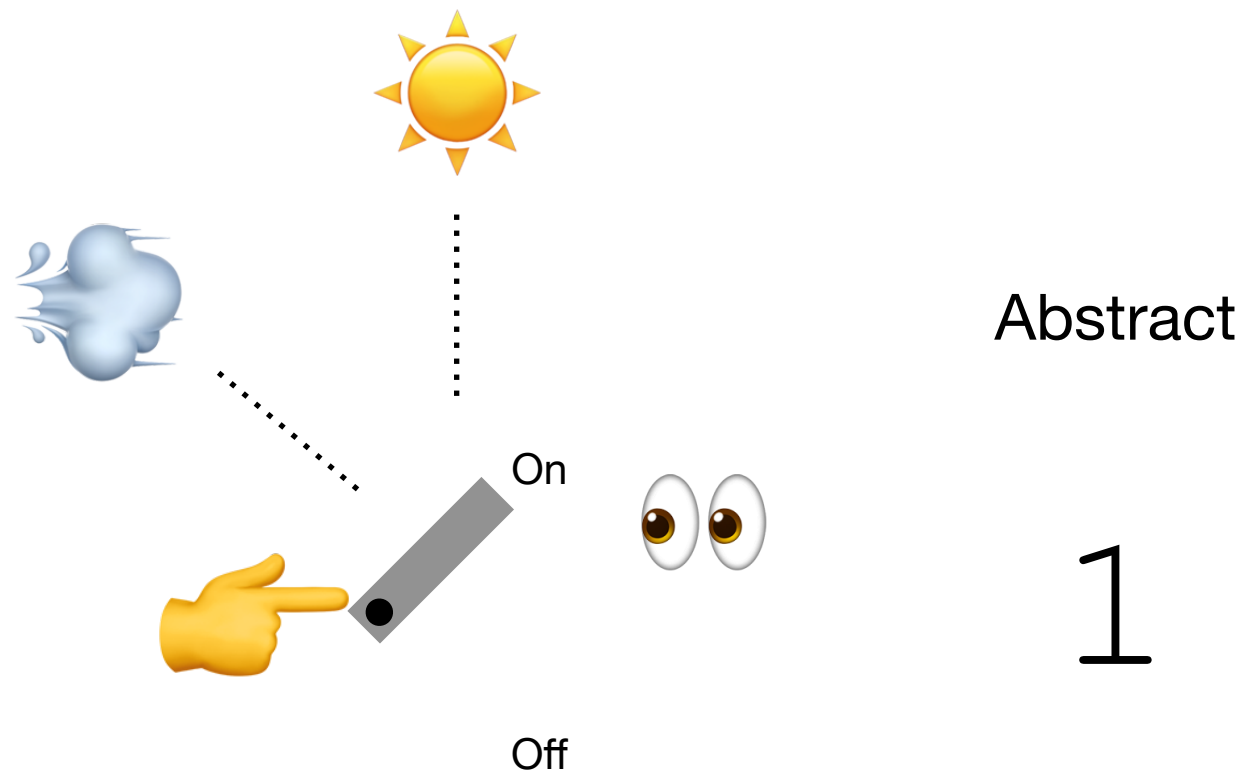Physical

Abstract

On

Off

1

Classical physics:
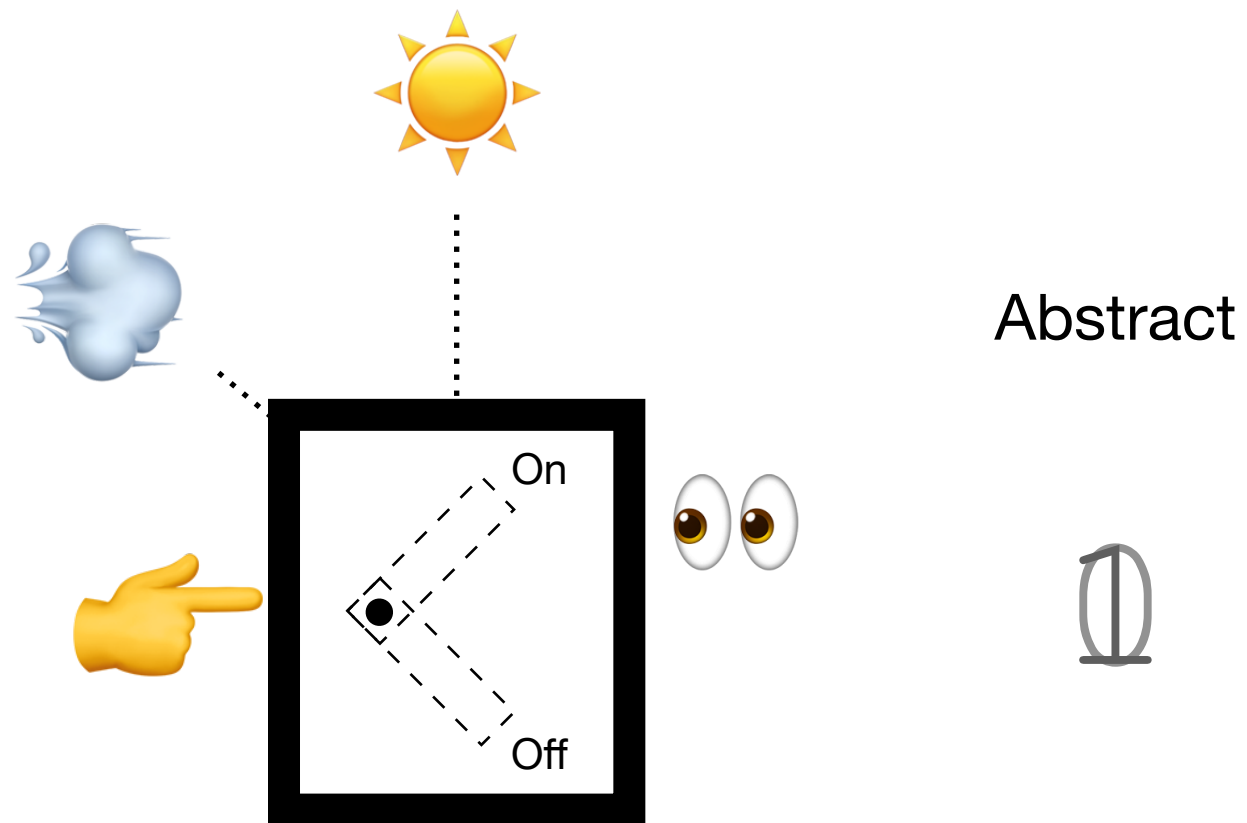
either 0 or 1

As it really is

Abstract

On

Off

1

Classical physics:

either 0 or 1

Isolation = magic

On

Off

Abstract

Quantum physics:

both 0 and 1

Qubyte

Combined picture
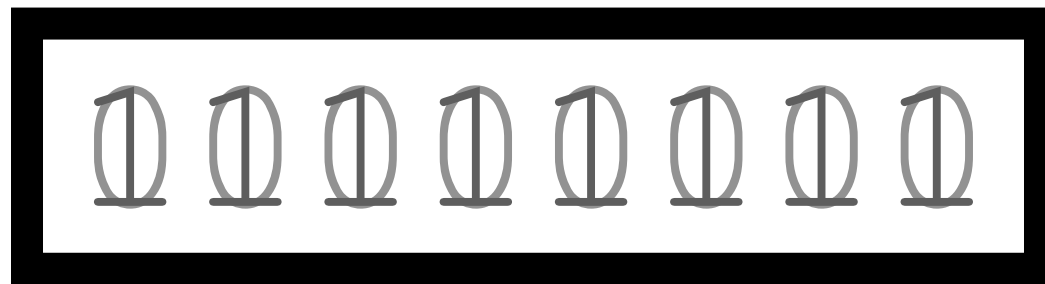
$\left(\text{In our laptop: } 10110100\right)$

Quantum physics:

up to 256 bit strings at once

Quantum computers
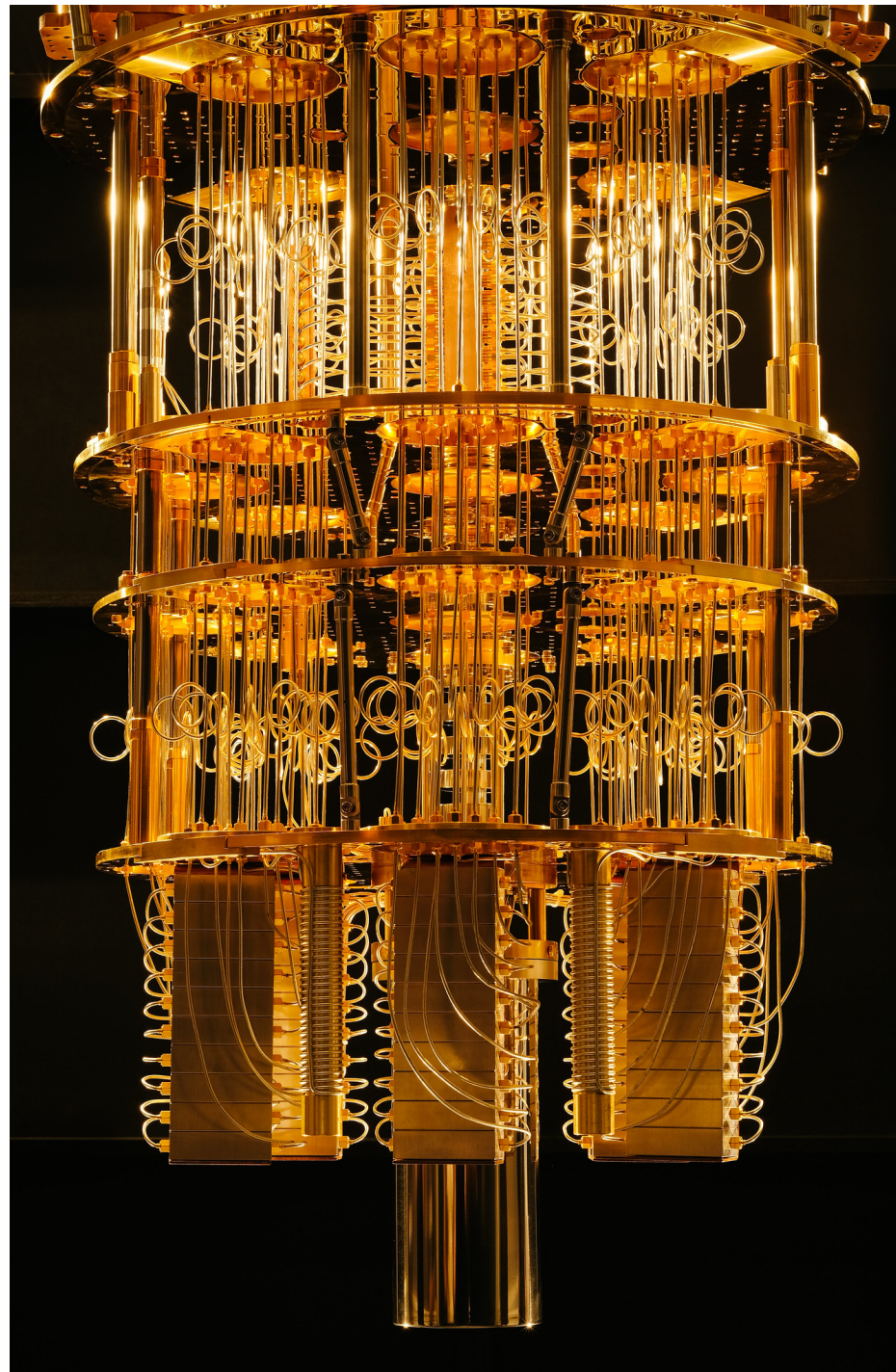
Takeaways

- The environment matters, extreme isolation makes wonders

- Quantum is all about being in multiple states at the same time