



# Introduction to Quantum Computing

Workshop Overview

Maria Alandes Pradillo



## What?

#### Introduction to Quantum Computing

Target Group: Highschool Students

Ages: 15 to 19 years old

Duration: 1h30

Bits and Logical Gates

Superposition, Entanglement and Qubits Moore's Law and Intractable problems

Groover's algorithm

Unplugged workshop

A bit of theory & explanations

Work in pairs/groups

Discussion and Interaction

Learning objectives and pedagogical scenario: <a href="https://cernbox.cern.ch/index.php/s/X3AD9q8yLs5xPrD">https://cernbox.cern.ch/index.php/s/X3AD9q8yLs5xPrD</a>

## Who?



### WIT Outreach



Inspire the next generations



Showcase female role models









More about WIT: <a href="https://wit-hub.web.cern.ch">https://wit-hub.web.cern.ch</a>

## When?

#### TecDay – 17<sup>th</sup> March 2022

Organised by
Swiss
Academy of
Engineering
Sciences

National event across
Switzerland

College Sismondi in Geneva

Students enrol to 3 sessions of 1h30 throughout the day Participants from Industry and Academia

Highschool students from 15 to 19 years old Two workshops organised by CERN

Superconductors by School Lab

Quantum Computing by WIT

Groups of 12 students

More about TecDay: <a href="https://www.satw.ch/fr/tecday">https://www.satw.ch/fr/tecday</a>

## How?



Contact: wit-outreach@cern.ch