Contribution ID: **199** Type: **not specified**

Hands-On Practical Introduction to Quantum Computing

This practical introduction to quantum computing aims to offer a foundational understanding of key quantum computing concepts, algorithms, and practical applications. The lectures will cover the basics of quantum computing including qubits, entanglement, and quantum gates, as well as an introduction to quantum circuits. As an example, we will explore in the tutorial the quantum dynamics of a spin system on quantum computer.

Target Audience: Students, academics and industry representatives interested in a practical introduction to quantum computing.

Prerequisites: Basic Python knowledge

Presenting Author

Email

Student or Postdoc?

Institute

Registered for the conference?

CHPC User

No

CHPC Research Programme

Primary author: PETRUCCIONE, Francesco (UKZN)

Presenter: PETRUCCIONE, Francesco (UKZN)

Session Classification: Workshop