



Contribution ID: 341

Type: Oral Presentation

Quantum computing education availability in South Africa

Several formal initiatives, universities, and research institutions are working on quantum computing education in South Africa. This study explores the availability of quantum computing courses and educational resources for quantum computing students in South Africa, assessing their target levels, educational prerequisites, structure, and content.

The investigation identifies offerings from universities, online platforms, and research institutions, categorising them by complexity: introductory, intermediate, or advanced.

Prerequisite knowledge in linear algebra, programming, and quantum mechanics is analysed to determine accessibility. Course structures (e.g., lectures, workshops, hands-on projects) and core topics (e.g., qubits, quantum algorithms, error correction) are examined to evaluate pedagogical approaches. The findings aim to guide prospective learners

and highlight the gaps in South Africa's quantum education landscape.

Apply for student award at which level:

None

Consent on use of personal information: Abstract Submission

Yes, I ACCEPT

Primary author: FEATHERSTONE, Coral (CSIR)

Co-authors: LOURENS, Laing (CSIR); Mr LISA, Nyameko (CSIR)

Presenters: FEATHERSTONE, Coral (CSIR); LOURENS, Laing (CSIR); Mr LISA, Nyameko (CSIR)

Session Classification: Physics for Development, Education and Outreach

Track Classification: Track E - Physics for Development, Education and Outreach