



Canadian Association
of Physicists

Association canadienne
des physiciens et physiciennes

Contribution ID: 4614

Type: **Invited Speaker / Conférencier(ère) invité(e)**

How Canada and the world are using open-source content to teach quantum computing

Wednesday 29 May 2024 10:30 (30 minutes)

The rapid growth of the quantum industry has brought about a shift in the need to efficiently train the next generation of scientists and engineers, to address the challenges of further developing quantum computers. As part of its multi-pronged approach to drive the quantum computing industry forward and address the demand for trained quantum specialists, Xanadu has been collaborating with professors in nearly 60 universities worldwide (over 15 in Canada) to incorporate practical quantum computing education using PennyLane (Xanadu's open-source software library for quantum programming) in undergraduate and graduate courses. We present an analysis of how quantum computing is being taught across Canada and around the world, and the impact of experiential learning in quantum computing using open-source resources.

Keyword-1

Keyword-2

Keyword-3

Author: NINO, Daniel Felipe (Xanadu Quantum Technologies Inc.)

Presenter: NINO, Daniel Felipe (Xanadu Quantum Technologies Inc.)

Session Classification: (DQI/DPE) W2-4 Q-STATE: Quantum education - Three Perspectives | Q-STATE : L'éducation quantique - Trois perspectives (DIQ/DEP)

Track Classification: Symposia Day (Wed May 29) / Journée de symposiums (Mercredi 29 mai): Symposia Day (DQI/DPE - DIQ/DEP) - Q-STATE: Quantum Science, Technology, Applications, Training, and Education | Science, technologie, applications, formation et éducation quantiques