Plan Overview

Title: Quantum simulations

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Funder: Digital Curation Centre (dcc.ac.uk)

Funding opportunity number: 59576

Template: Digital Curation Centre

Last modified: 01-06-2021

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Quantum simulations

Data Collection

What data will you collect or create?
Histograms of measurements obtained from quantum computers running a quantum simulation.

How will the data be collected or created?
Quantum programming language
Qiskit and Pyquil package (Python)

Documentation and Metadata

What documentation and metadata will accompany the data?
Qiskit and Pyquil standard documentation
Scientific manuscript describing the results of the study

Ethics and Legal Compliance

How will you manage any ethical issues?
We do not expect any ethical issue. In the case of unexpected issues, we will consult local legal experts at Bar-Ilan University

How will you manage copyright and Intellectual Property Rights (IP/PR) issues?
IP will be managed by Bar-Ilan Research and Development (BIRAD) corporation.

Storage and Backup

How will the data be stored and backed up during the research?
Researchers' OneDrive and Google drive storage

How will you manage access and security?
Personal password for each user

Selection and Preservation

Which data are of long-term value and should be retained, shared, and/or preserved?
Quantum algorithms' codes and measurement data results from quantum computers

What is the long-term preservation plan for the dataset?
The codes and results will be published in peer-review journals, as supplemental information to the main text.

Data Sharing

How will you share the data?
The codes and data will be published online on the websites of the peer-review journals

Are any restrictions on data sharing required?
No

Responsibilities and Resources

Who will be responsible for data management?
What resources will you require to deliver your plan?

Internet connection.
Google drive and OneDrive accounts.
Publication fees for peer-review journals offering open access.