



April 25, 2018

## PhD and/or Post-doctoral position in quantum computing at the Fritz-Haber-Institute of the Max-Planck-Society

Quantum computers are not just interesting for encryption but also for solving important equations of electronic-structure theory (see, e.g., N. Moll *et al.*, *Quantum optimization using variational algorithms on near-term quantum devices.*, <https://arxiv.org/abs/1710.01022>).

The Fritz-Haber-Institute (FHI) of the Max-Planck-Society has an opening for a post-doctoral and/or PhD position in quantum computing. The research is a collaboration of the theory department of Prof. Matthias Scheffler and IBM Research – Zurich represented by Dr. Nikolaj Moll. The focus will be on the development of quantum chemistry algorithms for quantum computers. You will contribute to the advancement of open-source software tools in Python and implement optimal algorithms on large numbers of qubits.

What is required:

- Knowledge about electronic-structure theory.
- Strong programming skills in Python.
- Experience in quantum computing and related software development is a plus.

You can find more information about the Theory Department of the FHI, here:

<https://th.fhi-berlin.mpg.de/site/> .

Potential candidates should send their application, including cover-letter, curriculum vitae, transcript of grades and the contact-details of at least three references as pdf to [pietsch@fhi-berlin.mpg.de](mailto:pietsch@fhi-berlin.mpg.de) .

The position will be connected to the European Center of Excellence NOMAD (Novel Materials Discovery): <https://nomad-coe.eu/> .

