
Quantum Information and Quantum Computing, Problem set 13

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In this problem set you are going to implement and test on the IBM-Q platform a small, yet complete VQE algorithm. The problem set is based on the original work where VQE was first introduced [1]. The goal is to compute the ground state energy of the H_2 molecule, using a simple variational ansatz. All steps are described in the Jupyter notebook associated to this problem set, to which you should refer.

[1] A. Peruzzo et al., *A variational eigenvalue solver on a photonic quantum processor*, Nature Communications volume 5, 4213 (2014)