

Optical Experiment Manuscript

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1 Introduction

In this manuscript, we will go through the detail of the optical experiment setup of the quantum circuit for Variational Quantum Eigensolver (VQE).

2 Experimental Setup

The experiment consists of:

- A laser source.
- Spatial light modulator (SLM).
- Beam Splitter (BS).
- Polarized Beam Splitter (PBS).
- Half-Wave Plate (HWP).
- Quarter-Wave Plate (QWP).
- Dove Prism (DP).