

Deep Learning for Quantum State Tomography

This thesis presents deep learning approaches for quantum state reconstruction.

Introduction

Quantum computing enables exponential speedups for specific problems.

$$i\hbar\frac{\partial\Psi}{\partial t} = H\Psi$$

$$\mathcal{L} = \mathcal{L}_r + \beta\mathcal{L}_{\text{KL}}$$

Methods

Results

$$F = 0.99 \pm 0.01$$

Conclusion