UPPSALA UNIVERSITY

Degree Project D in Computational Science, 30c

DEPARTMENT OF PHYSICS AND ASTRONOMY DIVISION OF MATERIAL STUFF?

Holonomic optimal control for qudits

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Abstract

1 Engelskt abstrakt

Sammanfattning

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Test! Här är några relevant källor! [1],[2],[3]

1 Introduction

Quantum computing (QC) is a field of quantum technology which aims to achive computational methods not possible using classical computation by taking advantage of quantum mechanical effects, such as superposition, entaglement, and interference.

References

- [1] Sjöqvist E, Tong DM, Mauritz Andersson L, Hessmo B, Johansson M, Singh K. Non-adiabatic holonomic quantum computation. New journal of physics. 2012;14(10):103035.
- [2] Morris JR, Shore BW. Reduction of degenerate two-level excitation to independent two-state systems. Physical review A, General physics. 1983;27(2):906–912.
- [3] Wang Y, Hu Z, Sanders BC, Kais S. Qudits and High-Dimensional Quantum Computing. Frontiers in physics. 2020;8.