

UPPSALA UNIVERSITY

DEGREE PROJECT D IN COMPUTATIONAL SCIENCE, 30C

DEPARTMENT OF PHYSICS AND ASTRONOMY
DIVISION OF MATERIAL STUFF?

Holonomic optimal control for qudits

Author:
Tomas ANDRÉ

Supervisor:
Erik SJÖQVIST
Subject reader:
Martin ALMQUIST

June 23, 2021



Abstract

1 Engelskt abstrakt

Sammanfattning

Svenskt abstrakt

Contents

References

2

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

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.