Quantum physics grew up widely in the second half of the 20th century, many people contributed to pushing forward on many quantum technologies. I was highly unaware of the new achievements that quantum technologies can give us in the forthcoming years and this is a great surprise to me because I can now learn from some of the cutting-edge that are performing on the quantum scene.

PhD workbook

PhD workbook

Sergio Martínez-Losa Del Rincón

Report workbook

John Doe

John Doe University

December 2020

Contents

List of Equations

Glossary

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Glossary item 2 Glossary item 2 1

Declaration

I hereby declare that the work presented in this thesis is entirely my own and that I did not use any other sources and references than the listed ones. I have marked all direct or indirect statements from other sources contained therein as quotations. Neither this work nor significant parts of it were part of another examination procedure. I have not published this work in whole or in part before. The electronic copy is consistent with all submitted copies.

Zaragoza (Aragón), December 2020

Abstract

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1
Introduction

This is an introduction. **this is bold** *this is italic text*

This is Glossary item 1 and this is Glossary item 2.

Citation here[1]. Footnote url here[1].

Another footnote simple [2]

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[1]http://google.com
[2]this is a footnote

2
Another chapter

This is a chapter.

Second page.

Footnote url here with header[3].

$$f = 28 \cdot \sqrt{\left(B_{DC} + (N_y - N_x) \cdot 0.86 \cdot 10^6 \cdot 4\pi \cdot 10^{-7}\right) \cdot \left(B_{DC} + (N_z - N_x) \cdot 0.86 \cdot 10^6\right) \cdot 4\pi \cdot 10^{-7}}$$

Equation 2.1: Theoretical Kittel equation expanded for a Permalloy thin-film for X-axe

2.1   Section here

This is a new section.

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[3]http://google.com

Epilogue

This ia an epilogue.

Bibliography

[1] Y. Li, T. Polakovic, Y.-L. Wang, J. Xu, S. Lendinez, Z. Zhang, J. Ding, T. Khaire, H. Saglam, R. Divan, J. Pearson, W.-K. Kwok, Z. Xiao, V. Novosad, A. Hoffmann, and W. Zhang, "Strong coupling between magnons and microwave photons in on-chip ferromagnet-superconductor thin-film devices.", *Physical review letters*, vol. 123, p. 107701, Sept. 2019.

List of Publications

[1] F. Luis, P. J. Alonso, O. Roubeau, V. Velasco, D. Zueco, D. Aguila, L. A. Barrios, and G. Aromí, "A dissymmetric [gd$_2$] coordination molecular dimer hosting six addressable spin qubits", 2020.

[2] S. Savasta, O. D. Stefano, A. Settineri, D. Zueco, S. Hughes, and F. Nori, "Gauge principle and gauge invariance in quantum two-level systems", 2020.