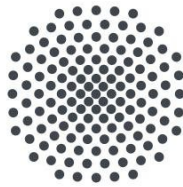# Integrated single emitters under cryogenic conditions

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01.01.2020

Abstract

Abstract goes here

Dedication

To mum and dad

Declaration

I declare that..

Acknowledgements

I want to thank...

Contents

Chapter 1

Introduction

Chapter 2

Theory

We want to discuss: bloch equations(on demand single photon source) single photon statistics A). Fourier limited emitter. LUMO, HOMO. Broadening

B). dipolar emission fiber microlense optics(collection of photons) fibers as waveguides(cross polarization stipulation) nanowaveguides C). stark-shift for energy shift interference of photons

2.1 Coherent properties of an organic molecule.

2.2 Modeling light-molecule interaction.

In order to gather control over the molecular emission the interaction of a molecule with a light pulse has to be modeled. The conventional approach is to solve optical Bloch equation describing the two-level system population dynamics. However, a molecule in a solid matrix cannot be treated as a closed system, hence requires a model involving coupling to the environment. ===Bloch-Redfield?=== The dynamics of a molecule in environment can be described as an open system in terms of density matrices via Lindblad master equation[?].

2.3 Modeling light-molecule interaction.

Chapter 3

Chapter Three Title

Chapter 4

Chapter Four Title