

Thesis Plan

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September 20, 2017

1 Introduction

- Overview of thesis - experiment to measure a range of acceleration

2 Theory

- Laser cooling
- Atomic structure of rubidium-87
- Atom Interferometry. Motivate sensitivity to inertial forces
- Sensitivity function and origins of intereferometer phase noise

3 Experiment Set-Up

4 Computer Control

5 Preparing Atoms

6 Interferometer Results

7 Improving Sensitivity