Electron Spin Resonance

PHY224 Lab 6

Fredrik Dahl Bråten, Pankaj Patil

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1 Abstract

In this exercise we experimentally calculate the gyromagnetic ratio γ for an electron. As we expect the ratio to be greater than the theoretically predicted value of $e/2m$, we compute this discrepancy in terms of *Lande g factor*. This analysis was done in Python by use of the numpy, scipy and matplotlib modules.

2 Introduction

3 Methods, Materials and Experimental Procedure

We successfully followed the procedures as described by the TA and lab manual [1] for this experiment.

4 Results

5 Discussion

6 Conclusions

A Appendix

A.1 Plots Frequency vs Magnetic Field

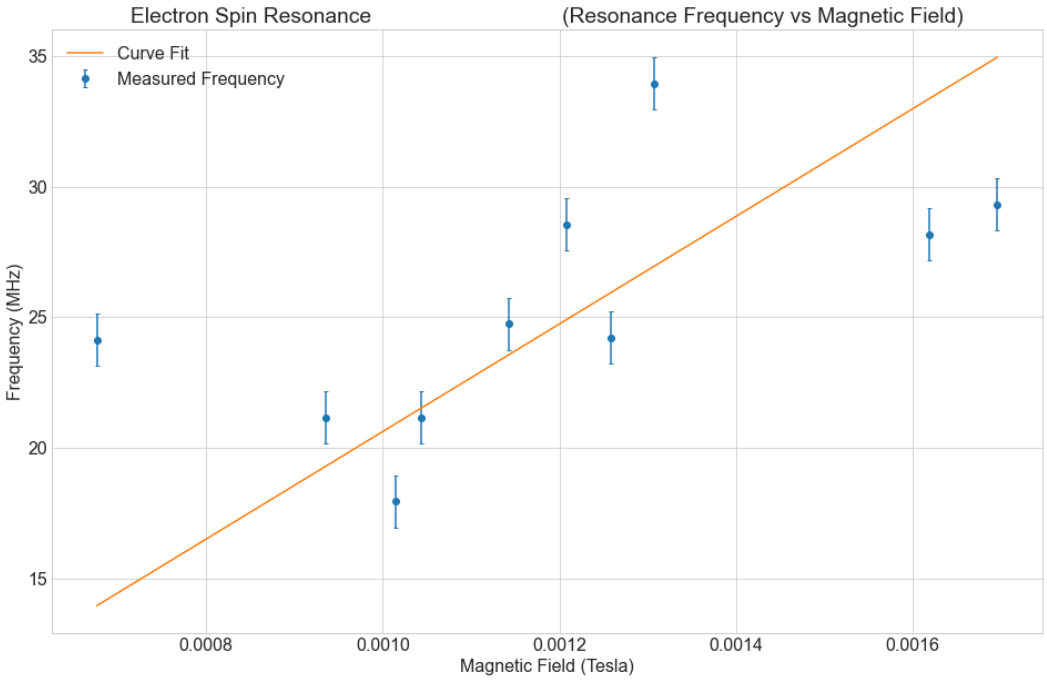

Figure 1: Frequency vs Magnetic Field

A.2 Python Code

References

[1] Electron Spin Resonance - electric-spin.pdf.pdf