

PHY 4210-01 Senior Lab
Lab P2: Electron Spin Resonance

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Abstract

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1 Data Analysis

1.1 Frequency Dependence of Resonance Field

1.2 Experimental Value of Gyromagnetic Ratio

1.3 Propagating Uncertainty in Gyromagnetic Ratio

1.4 Determining Line Width of Resonance Signal

2 Results

2.1 Discrepancy in Gyromagnetic Ratio

2.2 Discrepancy in Line Width

3 Conclusion

4 Appendices

4.1 Appendix A: Data

4.2 Appendix B: Source Code