## Electron Spin Ressonance

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- 5 References
- [1] Electron Spin Ressonance Manual https://www.physics.utoronto.ca/~phy224\_324/LabManuals/ElectronSpinResonance.pdf#page=4.73
- [2] Multimeter Datasheet https://en.wikipedia.org/wiki/Coaxial\_cable
- $[3] \label{thm:convergence} Scipy \ curve\_fit \ https://docs.scipy.org/doc/scipy/reference/generated/scipy.optimize. \\ curve\_fit.html \# curve\_fit$
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| # of LC | Time Delay $(\mu s)$ | $\Delta$ Delay ( $\mu$ s) |
|---------|----------------------|---------------------------|
| 1       | 4.04                 | 1.80                      |
| 5       | 20.45                | 2.60                      |
| 9       | 36.08                | 2.94                      |
| 13      | 51.12                | 3.26                      |
| 17      | 66.35                | 3.44                      |
| 21      | 81.72                | 3.68                      |
| 25      | 96.98                | 3.86                      |
| 29      | 112.13               | 4.07                      |
| 33      | 127.45               | 4.22                      |
| 37      | 142.69               | 4.26                      |
| 41      | 159.60               | 4.56                      |

Table 1: This table shows the time delay between the initial and reflected pulse for every 4 LC units. The uncertainty in delay is also given and further discussed in the results.