magnaticresonance

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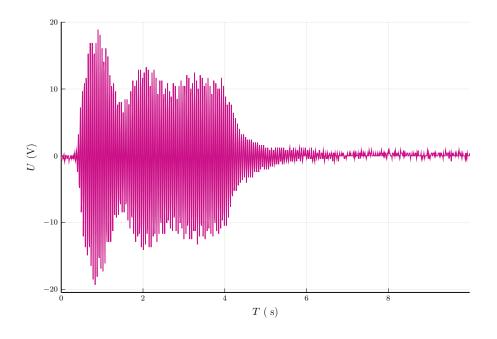


Figure 1: Signal of coil probe

ω	ω_m	ω_{res}
21.3 MHz	$108.3 \mathrm{~kHz}$	21.1917 MHz
$21.25 \mathrm{~MHz}$	$58.4 \mathrm{~kHz}$	$21.1916 \mathrm{~MHz}$
21.22 MHz	$28.2 \mathrm{~kHz}$	21.1918 MHz
$21.202 \mathrm{~MHz}$	$9.9~\mathrm{kHz}$	$21.1921 \ MHz$
21.192 MHz	$1.5~\mathrm{kHz}$	$21.1905~\mathrm{MHz}$

Table 1: Measured frequencies.

From the fitting in 2 results a value of $T_1 = (45.4 \pm 2.0 \text{ ms})$. From the measured frequency values shown in tab. 1 a mean value of $\omega_{res} = 21.19154 \pm 0.00061$ MHz is calculated for the resonance frequency, which is close to the guidevalue of 22.3 MHz.

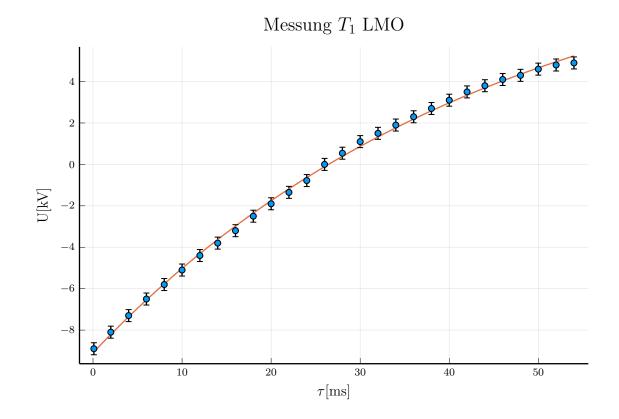


Figure 2: Measurement of T_1 .