

**Supporting information for “The Landau–Zener–Stückelberg–Majorana
transition in the $T_2 \ll T_1$ limit”**

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(Dated: June 26, 2023)

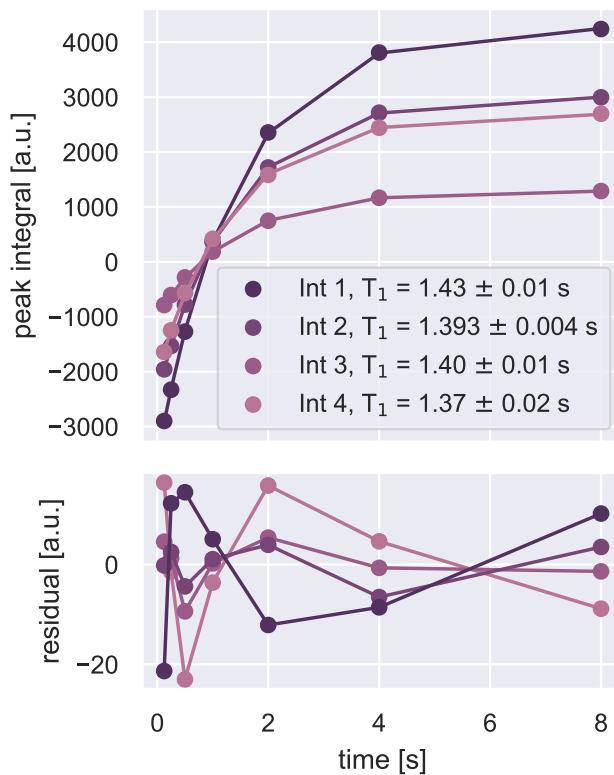


FIG. 1. Longitudinal relaxation time T_1 of protons in 200k polystyrene in CDCl_3 at -60°C and 500 MHz, measured by inversion-recovery. In the legend, integrals “Int 1” to “Int 4” correspond to the NMR peaks in Fig. 5(top) of the main text.

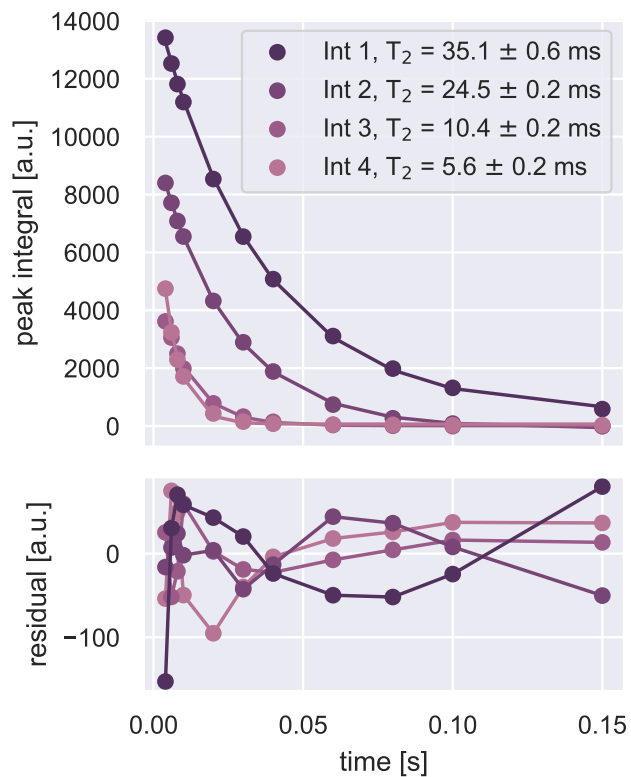


FIG. 2. Transverse relaxation time T_2 of protons in 200k polystyrene in CDCl_3 at -60°C and 500 MHz, measured using the Carr-Purcell-Meiboom-Gill (CPMG) sequence. In the legend, integrals “Int 1” to “Int 4” correspond to the NMR peaks in Fig. 5(top) of the main text.

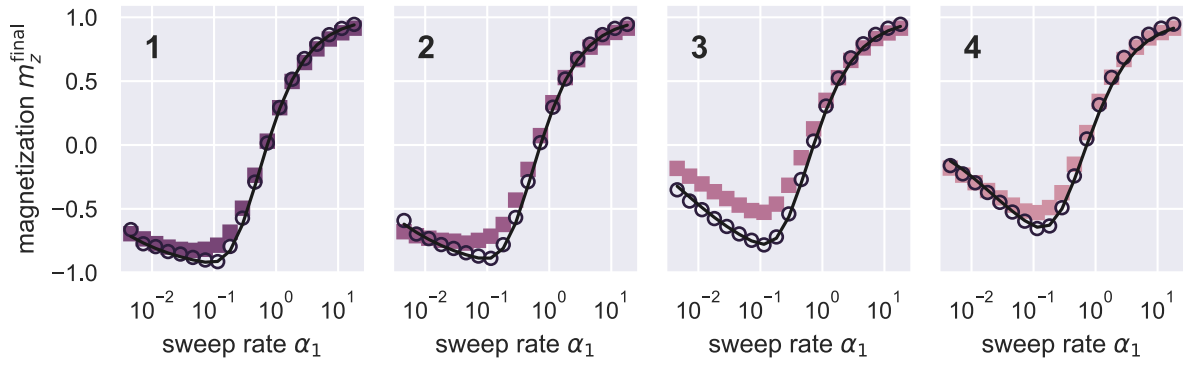


FIG. 3. Additional measurements of final magnetization after a sweep through resonance. The Fig. 5(bottom) experiment repeated with sweep rate = 800 kHz s^{-1} (unchanged) and sweep time $2t_0 = 25 \text{ ms}$ (reduced 4-fold). Colored squares are experimental data, black circles are numerical simulations, and black lines are based on eq. 63.

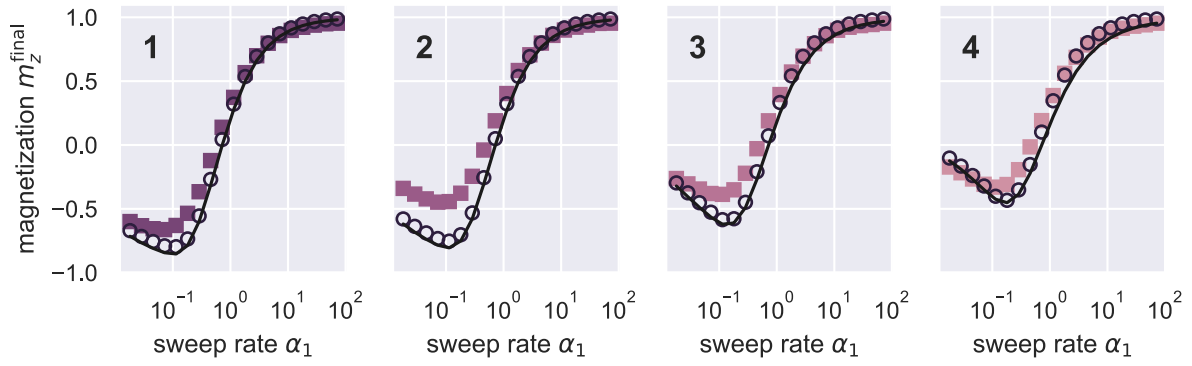


FIG. 4. Additional measurements of final magnetization after a sweep through resonance. The Fig. 5(bottom) experiment repeated with sweep rate = 200 kHz s^{-1} (reduced 4-fold) and sweep time $2t_0 = 100 \text{ ms}$ (unchanged). Colored squares are experimental data, black circles are numerical simulations, and black lines are based on eq. 63.