

Spin-Lattice relaxation measurement.

Experiment setup

- * Record the spectrum according to [“Short Instructions for basic operation of the Bruker NMR spectrometer”](#).
- * Calibrate 90^0 pulse according to [“90 Degree pulse calibration”](#) section.
- * Type “rpar” and select “H1T1null.BBI” in case of BBI probe. The extension need to match the probe.
- * Input the “p1”, “rg”, “sw” and “O1p” from previously recorded spectrum.
- * Set up “D7” to 30s or longer and take the spectrum “zg”.
- * Phase the spectrum according to [“Avance User’s Guide” pp.23](#). After the spectrum is correctly phased, save the phase correction by clicking “return” and “save & return”.
- * Change “D7” to 0.1s , take the spectrum and type “efp”. All peaks should be negative.
- * Increase the “D7” and find out the time when peaks intensity disappeared. Record such “D7” interval for each peak and calculate the Spin-Lattice relaxation time using formula from theoretical section [“Measurement of T1”](#)