

Quick T1 Determination

Determine the longest T1 for the sample (more details of this operation can be found in handout UVU438):

Once you have determined the pw90 for your sample,

mp(1,2)

jexp2

dot1 <rtm> NOTE: The next three items are the answers to the questions posed by the dot1 macro) and are a good starting point for small organic molecules.

Minimum T1 expected: 0.5 <rtm>

Maximum T1 expected: 5 <rtm>

Number of scans: 1 <rtm>

ga As the spectra accumulate, use **dssh** to view them. You can terminate the experiment with **aa** when you have determined the longest T1 of interest. The longest T1 of interest occurs when the last peak you are interested in goes through a null and becomes positive. You should interpolate when the peak crosses zero; this value is τ_{longest} .

$$\tau_{\text{longest}}/0.69 = T1_{\text{longest}}$$

INTEGRATION

When optimizing the delay for integration, at + $d1 = 5 * T1_{\text{longest}}$. Solve for d1. Nt should be at least 4.

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