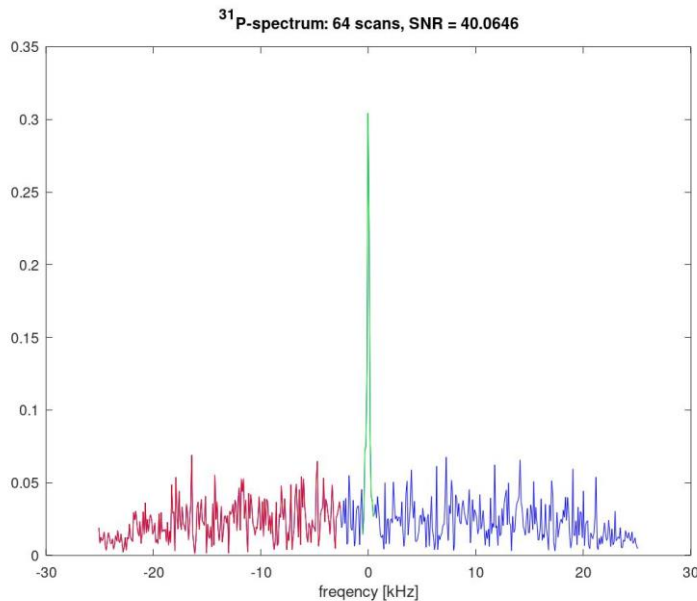


$^{31}\text{P}/^3\text{He}$ Experimente MPI-P 22.3.22

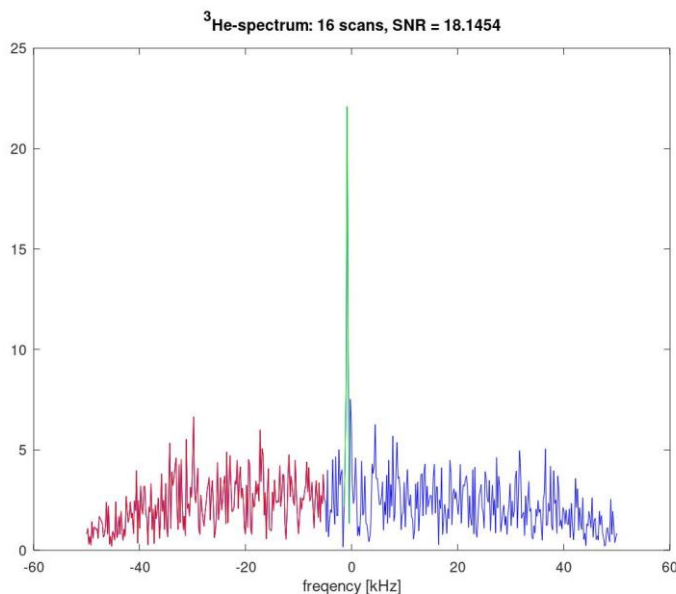
^{31}P : typical result as a magnitude spectrum (red: noise used BUT not its magnitude!!, green: signal integral)

$$\text{SNR} = 40.1/\sqrt{64} = 11.5/8 = 5.0 / \text{scan} (@50 \text{ kHz})$$



^3He : same as above but different spectral width (factor 2 higher) but only 16 scans

$$\text{SNR} = 18.1/4 = 4.5 / \text{scan} (@ 100 \text{ kHz}) = 4.5 * \sqrt{2} = 6.4/\text{scan} (@50 \text{ kHz})$$



That's strange, because theoretically I calculated $\text{SNR}(^{31}\text{P}) / \text{SNR}(^3\text{He})$ ca. 8
Here it is 0.8! However, I'm not 100% sure about the conc. of the phosphoric acid...have to check with Strübig!