

Exercise No. 2 – Vibration

1. Find the fundamental band of CO and plot its spectrum.
 - Determine the band center frequency $\hat{\nu}$ from your plot.
 - There is some “pollution” in the P-branch that comes from lines of ^{13}CO . Recalculate the spectrum for only the main isotopologue.
2. Explore the spectrum of either H_2O or CO_2 . Can you find the different vibration bands?