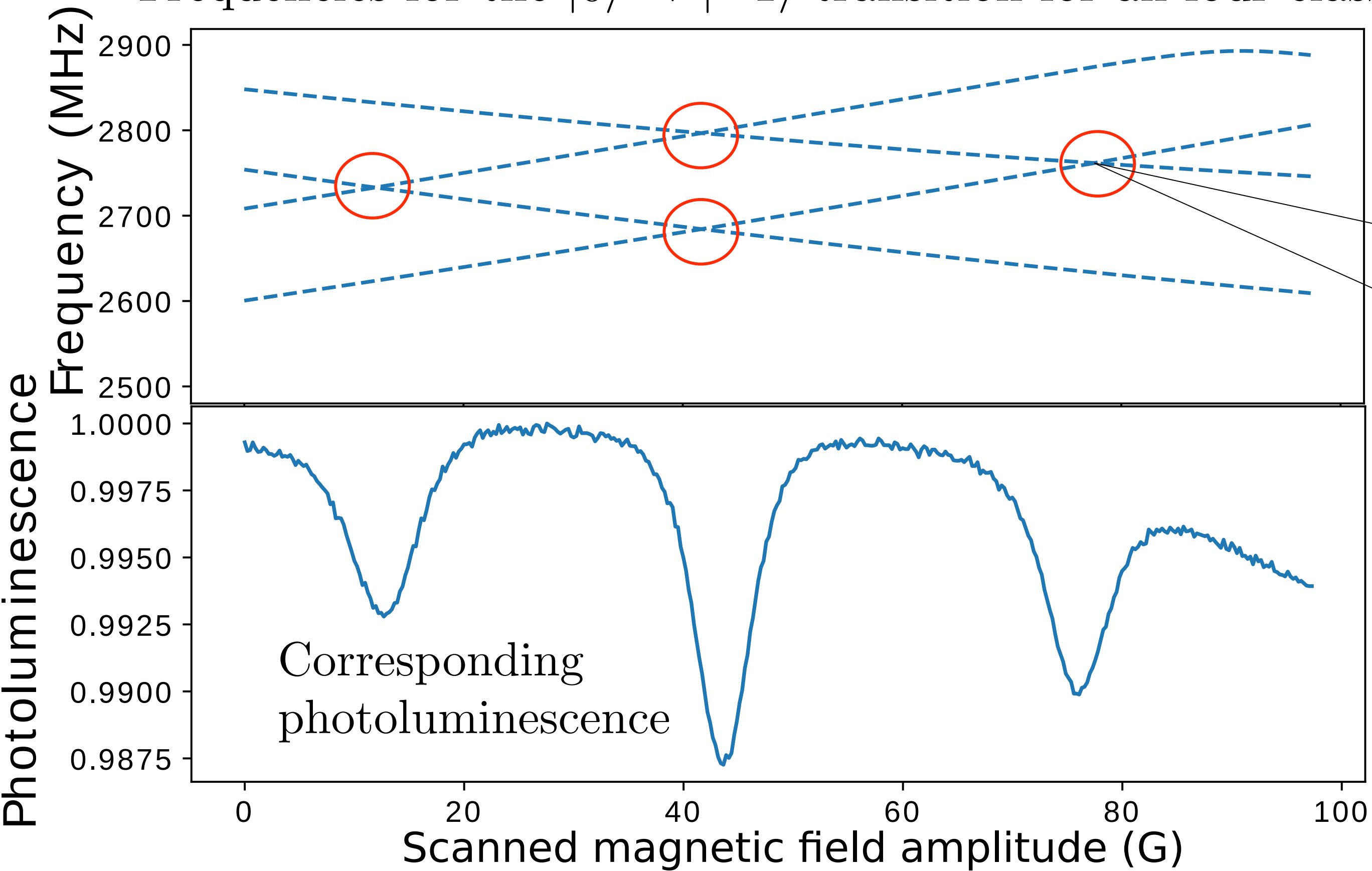
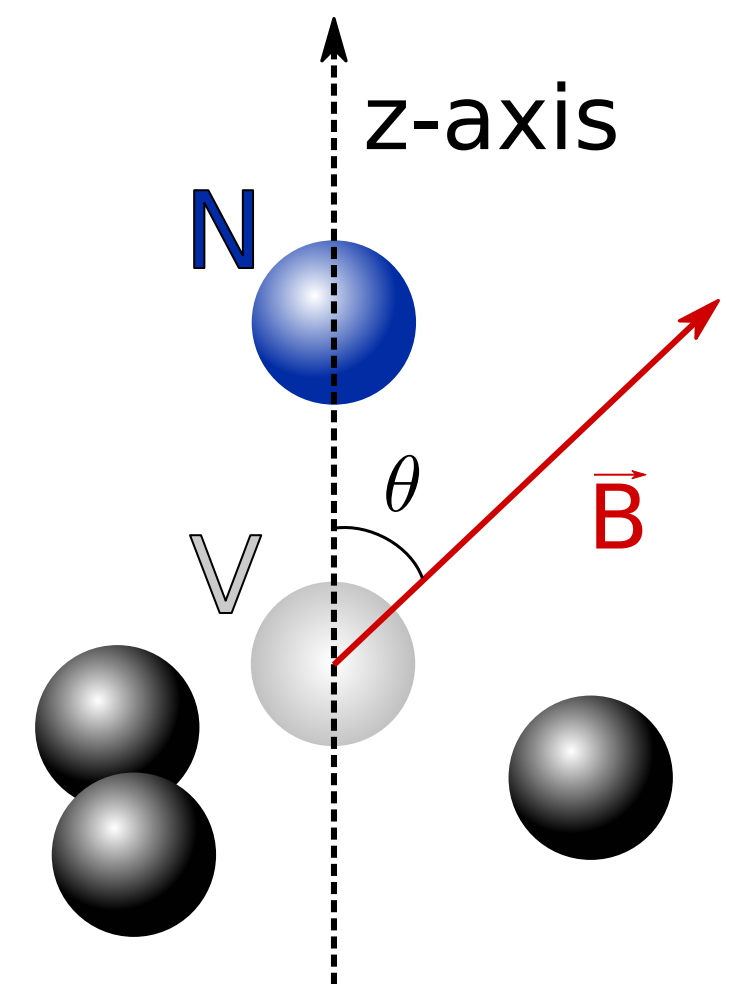
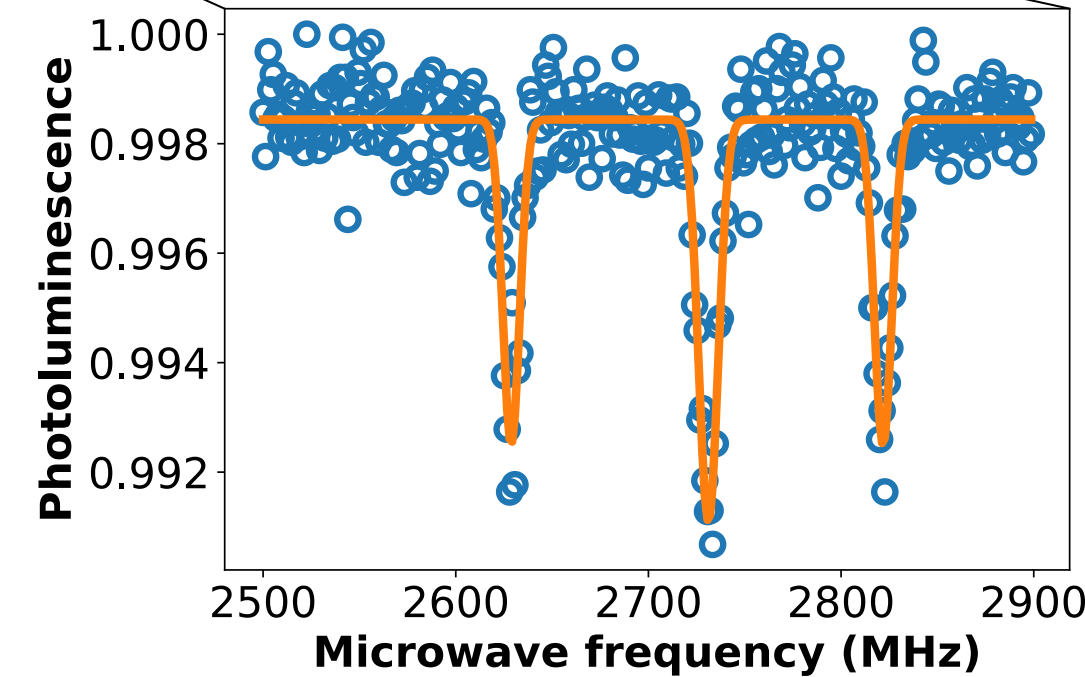


Frequencies for the  $|0\rangle \rightarrow |-1\rangle$  transition for all four classes of NV



Sample :  
15  $\mu\text{m}$  HPHT  
 $\sim 5$  PPM NV  
(Adamas)



By scanning an external magnetic field we can create NV-NV resonances between the four classes.

Each NV-NV resonance is met with a sharp drop in the total photoluminescence (for dense NV ensemble)