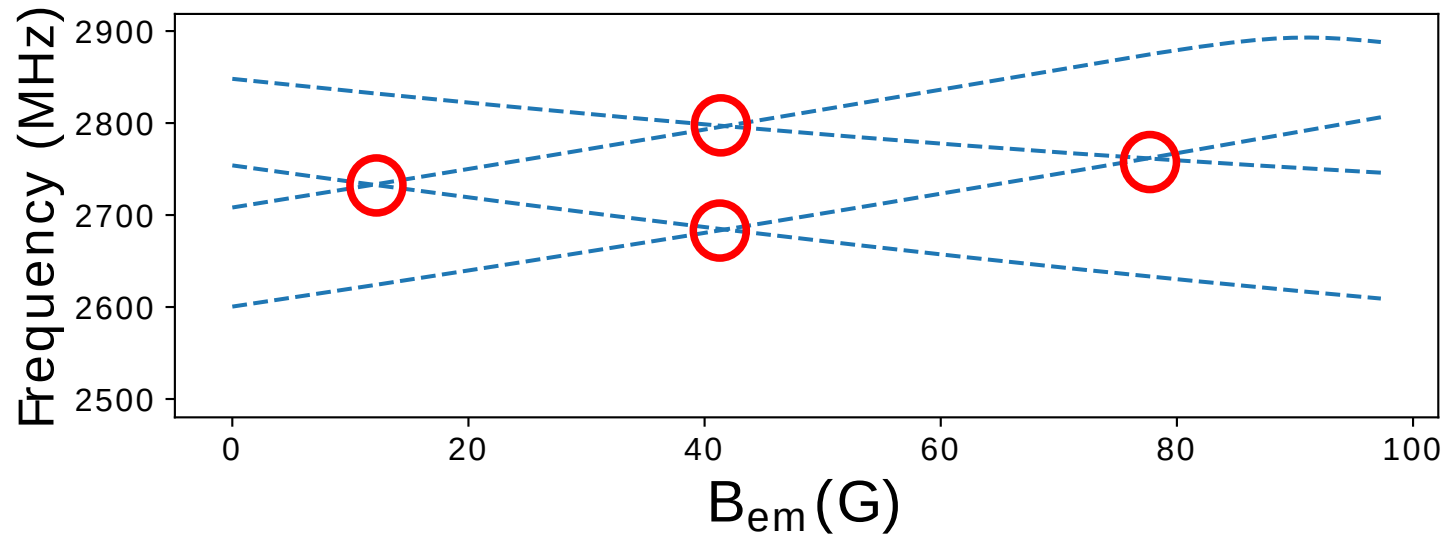
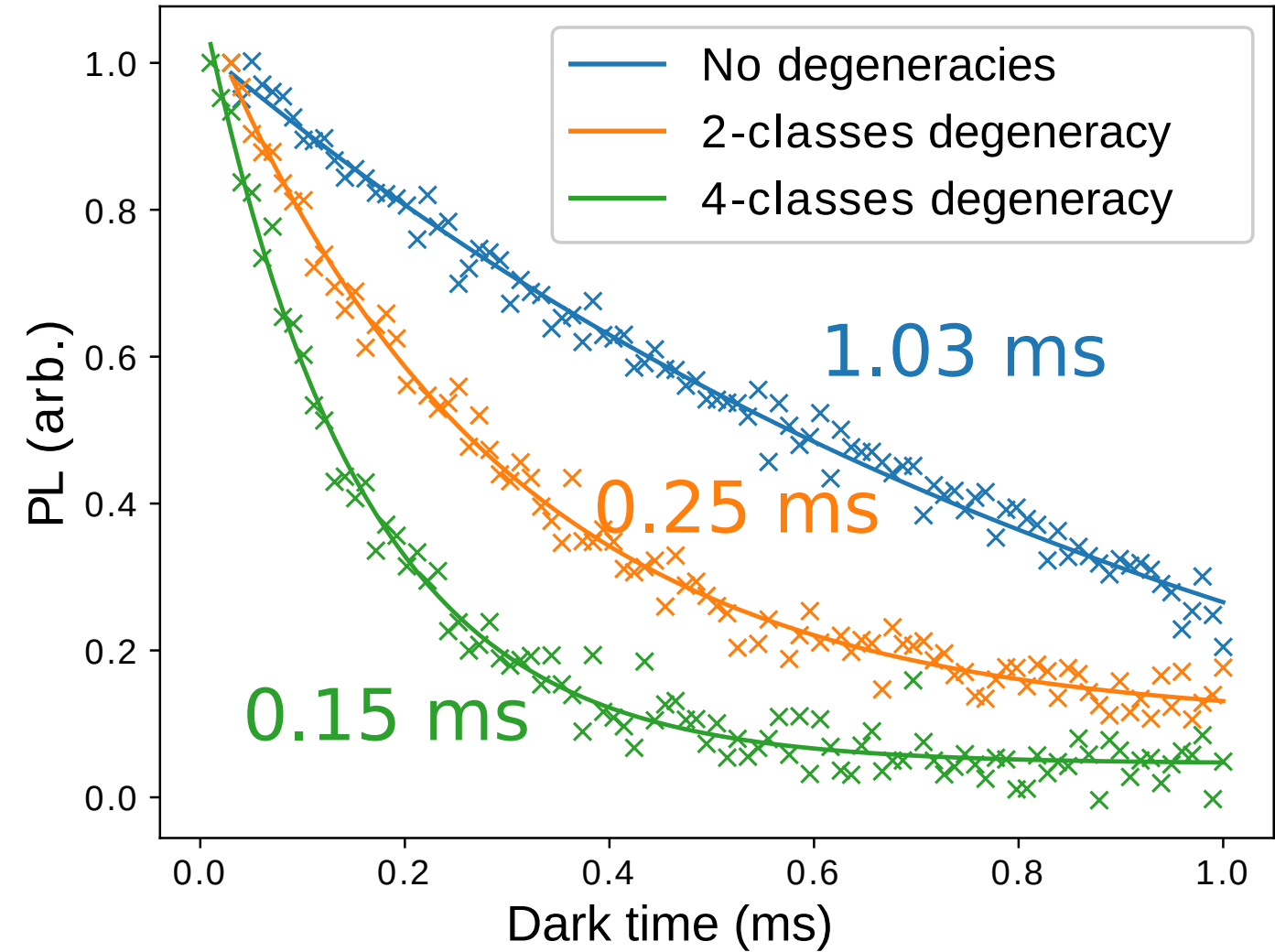
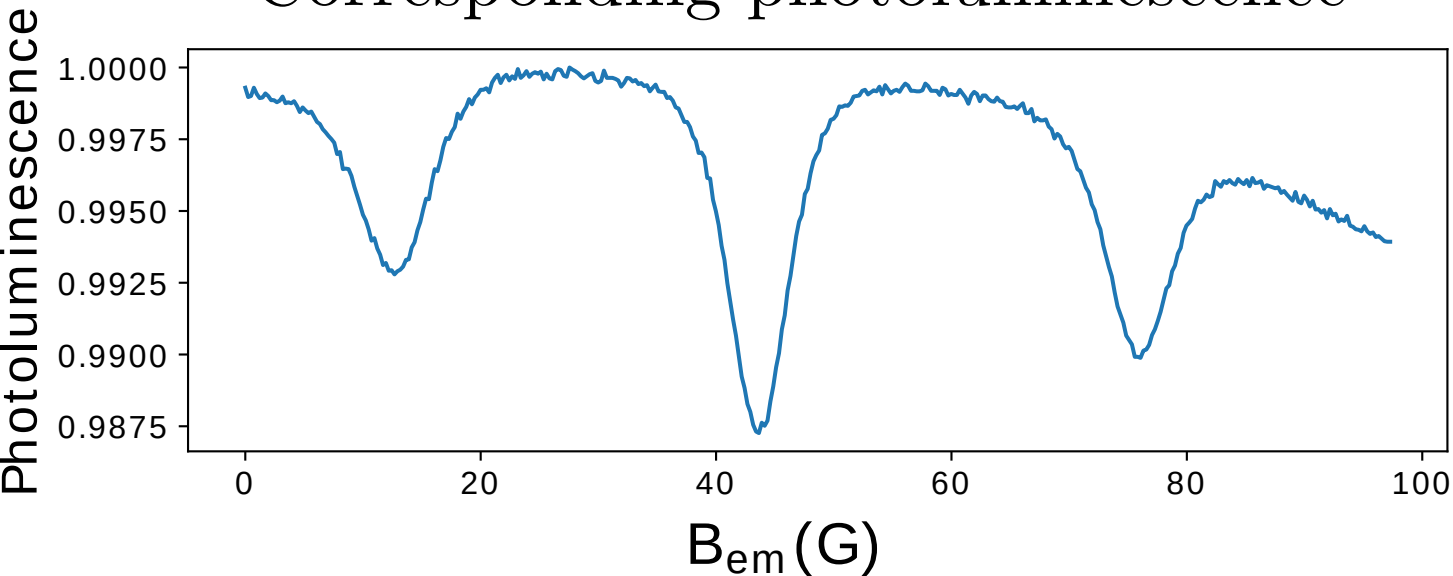


Sample : 15 μm HPHT diamond
 ~ 5 PPM of NV (Adamas)

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



Corresponding photoluminescence



T_1 for one class