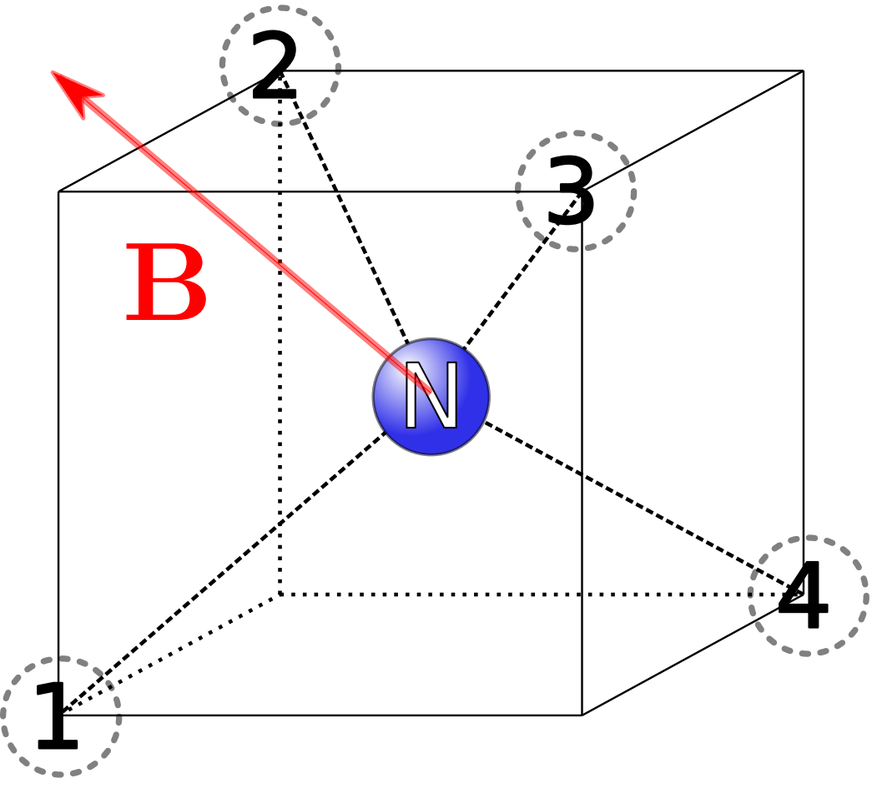

$$\hat{\mathcal{H}}_s = \underbrace{D\hat{S}_z^2}_{} + \gamma_e \hat{\mathbf{S}} \cdot \mathbf{B}$$

z direction defined by the crystal lattice

$$\mathcal{E}^i_{\pm 1} \approx D \pm \gamma_e \mathbf{B} \cdot \mathbf{e_i}$$

$\rightarrow$ 4 possible pairs of $\mathcal{E}^i_{\pm 1}$ (4 classes of NV)