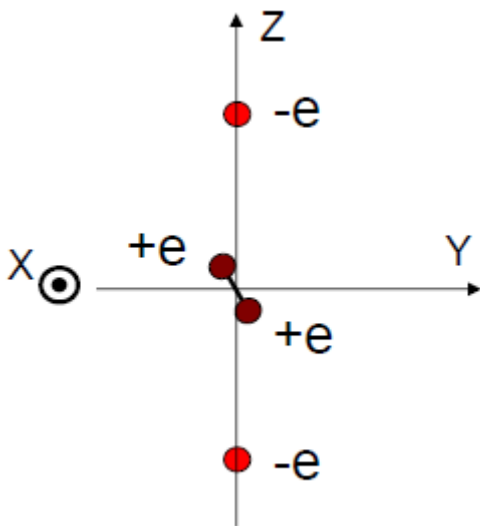


Quadrupole operator

The EFG tensor that was in the video has axial symmetry in its PAS. Tell how you can know this :

- from the equation on the previous slide
- from a visual inspection of the picture of this toy model.

Can you describe another simple toy model (as simple as possible) that leads to an EFG tensor that is **not** axially symmetric ?



$$V^{(2)} = \frac{-e}{4\pi\epsilon_0} \frac{1}{3d^3} \begin{bmatrix} -1 & 0 & 0 \\ 0 & -1 & 0 \\ 0 & 0 & 2 \end{bmatrix}$$