

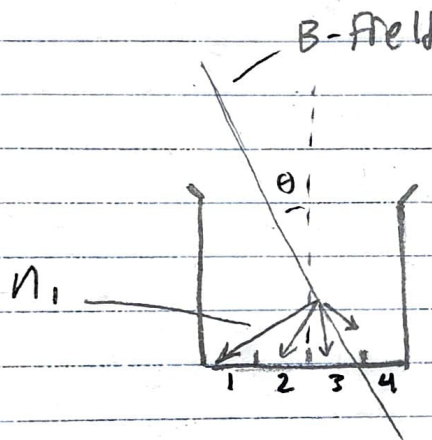
# Electron Pitch Anisotropy Demo

- Anisotropic:  $|\theta_B| < 30^\circ$

$$\rightarrow n_{\alpha=0^\circ} < n_{\alpha=90^\circ}$$

Where  $\alpha$  = electron pitch angle

$\theta_B$  = spacecraft pitch angle

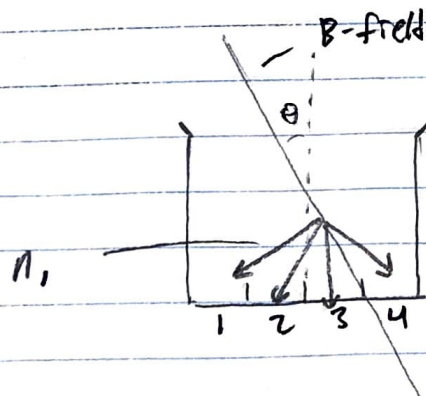


$\rightarrow$  Since  $n_{\alpha=0^\circ} < n_{\alpha=90^\circ}$ ,  
then:

$$n_1 > n_2 > n_3 > n_4$$

- Isotropic:  $|\theta_B| < 30^\circ$

$$\rightarrow n_{\alpha=0^\circ} = n_{\alpha=90^\circ}$$



$\rightarrow$  Since  $n_{\alpha=0^\circ} = n_{\alpha=90^\circ}$ ,  
then:

$$n_1 = n_2 = n_3 = n_4$$