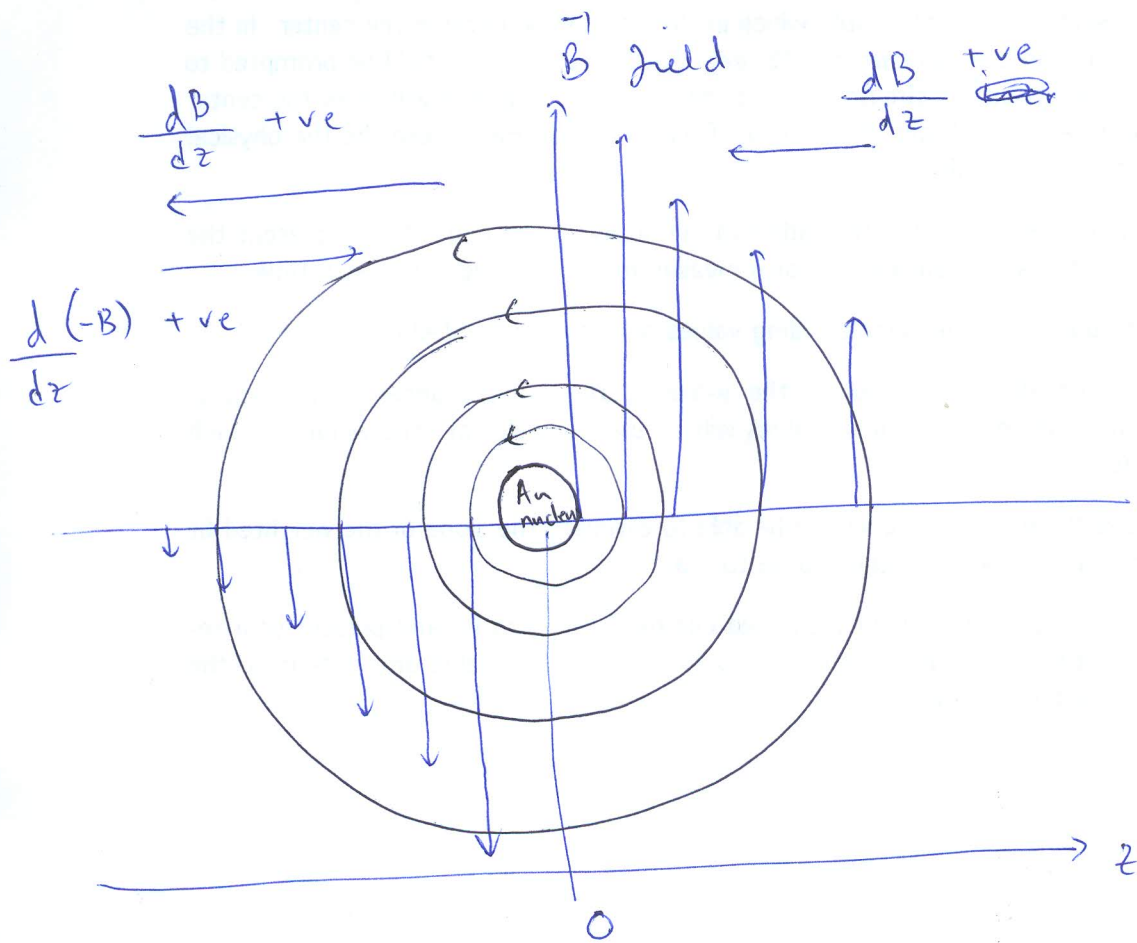


# Mott Scattering from an atom



- If an electron approaches the Au nucleus at  $z > 0$ , it sees a field gradient towards the left.

- In the region  $z < 0$ , the field direction is reversed. Hence an electron will still see a field gradient towards the left.

- Hence spins polarized along  $+z$  ( $-z$ ) will move towards the left (~~right~~) always, irrespective of whether they approach the atom at  $\pm z$ .