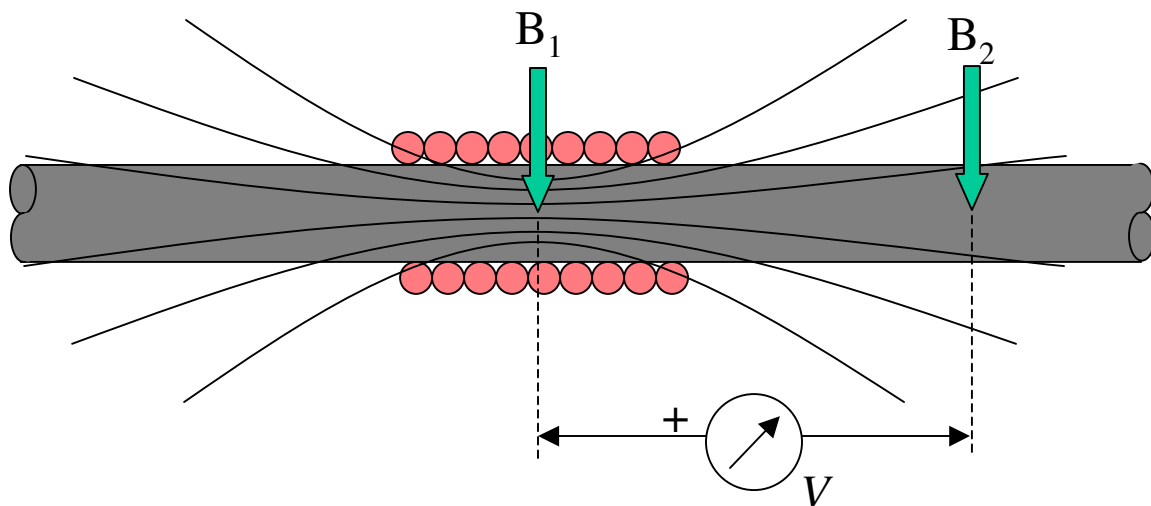


Conduction electrons are spin aligned with the magnetic field and get attracted by the magnetic gradient into the coil region.



Induced potential difference inside the wire

$$|V| = \left(\frac{\mu_B}{e} \right) (B_1 - B_2)$$

μ_B is the Bohr magneton
 e is electron charge