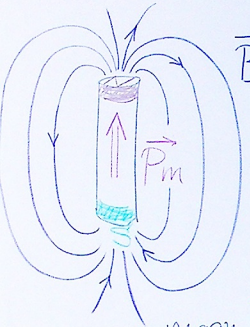
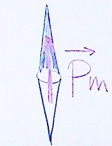
Rep.: Magnetfelder

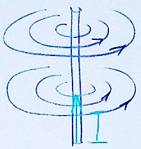




magn. Dipolmoment in B-Feld
→ Drehmoment ($\vec{p}_m \to \parallel \vec{B}$)
→ Kraft in inhom. B-Feld

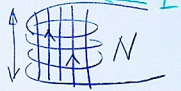
B-Felder von Strömen

gerader Leiter:



- kreisf. Feldlinien
- rechte-Hand-Regel
- $B = \frac{\mu_0 I}{2\pi r}$

Spule:



- im Innern homogen
- $B = \frac{\mu_0 N I}{L}$

Lorentzkraft

... auf bewegte Ladungen ($\vec{v}$)

$$\vec{F}_L = q(\vec{v} \times \vec{B})$$