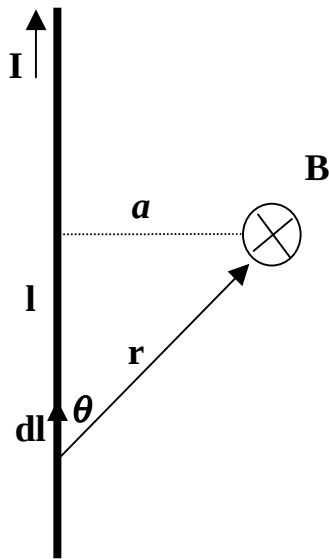


5. Camp del fil recte



$$d\vec{B} = \frac{\mu_0}{4\pi} I \frac{d\vec{l}}{r^2} \times \frac{\vec{r}}{r}$$

$$dB = \frac{\mu_0}{4\pi} I \frac{\sin\theta dl}{r^2}$$

$$B = \frac{\mu_0 I}{4\pi} \int_{-L}^{+L} \frac{a dl}{(l^2 + a^2)^{3/2}}$$

$$B = \frac{\mu_0 I}{2\pi a} \frac{L}{\sqrt{L^2 + a^2}}$$

fil infinit:

$$B = \frac{\mu_0 I}{2\pi a}$$

