

TBMT equation:

$$\begin{aligned}\Omega_x &= a(\gamma G) \cdot B_x, \\ \Omega_y &= a(\gamma G) \cdot B_y.\end{aligned}$$

Argument 1. $[\gamma \equiv \gamma_{eff}]$: Let $\vec{B} \cdot \vec{B}' = BB' \cos \theta, \theta \neq 0$. (Fig. 1.)

$$\gamma = \gamma' \wedge \Omega_y = \Omega'_y \xrightarrow{\text{TBMT}} B_y = B'_y \xrightarrow{\theta \neq 0} B_x \neq B'_x.$$

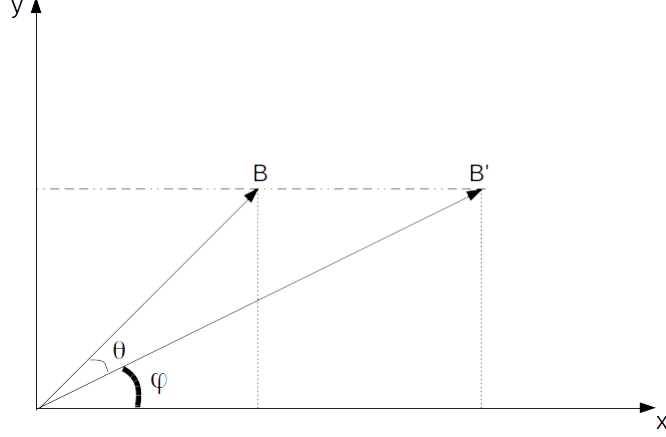


Figure 1: Argument 1 illustration.

$$\begin{aligned}\Omega'_x &= a\vec{B}' \cdot \hat{x} = aB' \cos \phi = B_y \tan \phi, \\ \Omega_x &= a\vec{B} \cdot \hat{x} = aB \cos(\theta + \phi) = B_y \tan(\theta + \phi), \\ \frac{\Omega_x}{\Omega'_x} &= \frac{\tan(\theta + \phi)}{\tan \phi}.\end{aligned}$$

Argument 2. $[\gamma \equiv \gamma_s]$:

$$\gamma_{eff} = f(\gamma_s, \Delta x, \Delta y).$$

