TBMT equation:

$$\Omega_x = a(\gamma G) \cdot B_x,$$
$$\Omega_y = a(\gamma G) \cdot B_y.$$

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

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

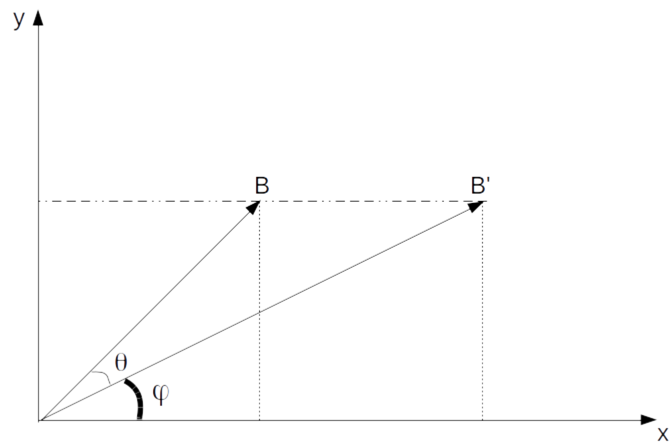
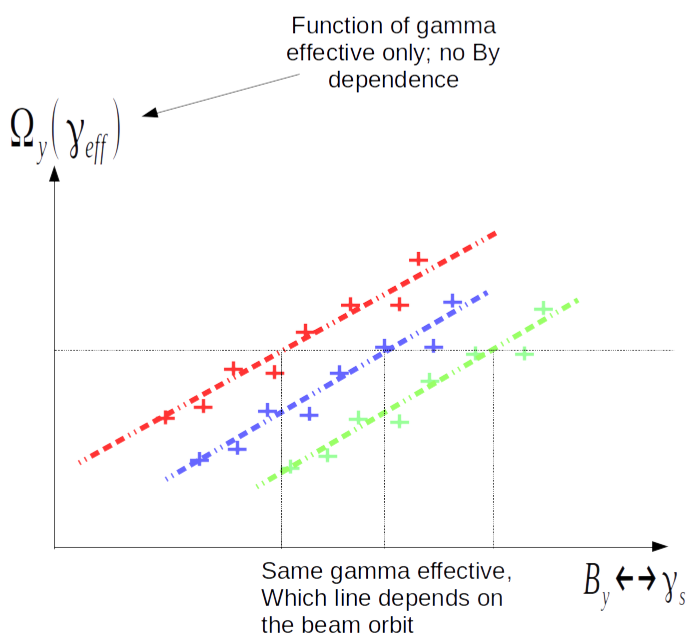


Figure 1: Argument 1 illustration.

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

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

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



$$
\begin{aligned}
\gamma &= (1-\beta^2)^{-1/2}, \\
\beta &= \frac{R}{mc} B_y = b(R) \cdot B_y, \\
\Omega_y &= a\left(\left[1 - b(R)^2 B_y^2\right] G\right) \cdot B_y, \\
\Omega'_y &= a\left(\left[1 - b(R')^2 B_y'^2\right]\right) \cdot B'_y
\end{aligned}
$$