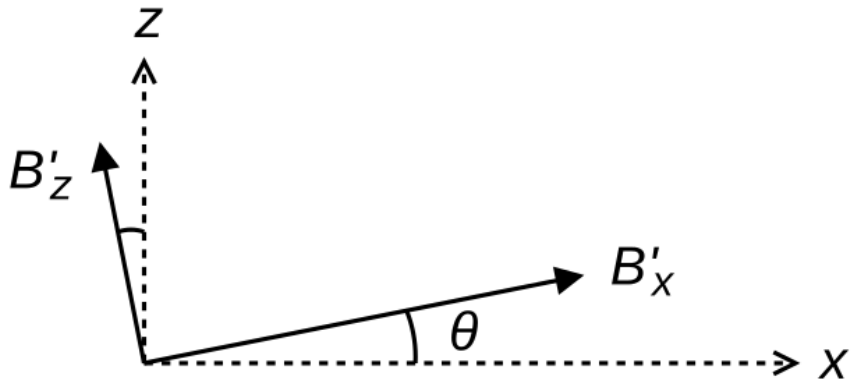
correction: probe tilt



$$B_x = B'_x \cos\theta - B'_z \sin\theta, \quad B_z = B'_z \cos\theta + B'_x \sin\theta \qquad (1)$$

1. θ is small:

$$B_x = B'_x - B'_z\theta, \quad B_z = B'_z + B'_x\theta$$

2. $B_z = 0$ at center:

$$\theta = -\frac{B'_z}{B'_x}$$