

Gravity variations

$$\gamma = \gamma_0 // \hat{z}$$

$$g(x, y, z) = \gamma_0 + \delta g(x, y, z)$$

$$\delta g(x, y, z) = \underbrace{\|g(x, y, z)\|}_{g(x, y, z)} - \underbrace{\|\gamma_0\|}_{\gamma_0}$$

$$g(x, y, z) \approx \gamma_0 + \hat{\gamma}_0^T \delta g$$

$$\delta g(x, y, z) \approx \hat{\gamma}_0^T \delta g$$

$$\approx \hat{z}^T \delta g$$

$$\approx \delta g_z$$

