

from trigonometry import cos

$$b = \sum_i \cos(\theta)^2 ((p_i - q_i) \cdot n_i + ((p_i + q_i) \times n_i) \cdot a + n_i \cdot t)^2$$

where

- $\theta \in \mathbb{R}$:angle of rotation
- $p_i \in \mathbb{R}^3$
- $q_i \in \mathbb{R}^3$
- $n_i \in \mathbb{R}^3$
- $a \in \mathbb{R}^3$
- $t \in \mathbb{R}^3$