from trigonometry import cos

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

where

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