

For Euler angles we get:

$$\begin{bmatrix} \phi \\ \theta \\ \psi \end{bmatrix} = \begin{bmatrix} \arctan \frac{2(q_0 q_1 + q_2 q_3)}{1 - (q_1^2 + q_2^2)} \\ \arcsin(2(q_0 q_2 - q_3 q_1)) \\ \arctan \frac{2(q_0 q_3 + q_1 q_2)}{1 - (q_2^2 + q_3^2)} \end{bmatrix}$$

Copio el Quaternion:  
0.34290,0.09578,0.81353,0.45979

$$q := \begin{pmatrix} 0.34290 \\ 0.09578 \\ 0.81353 \\ 0.45979 \end{pmatrix}$$

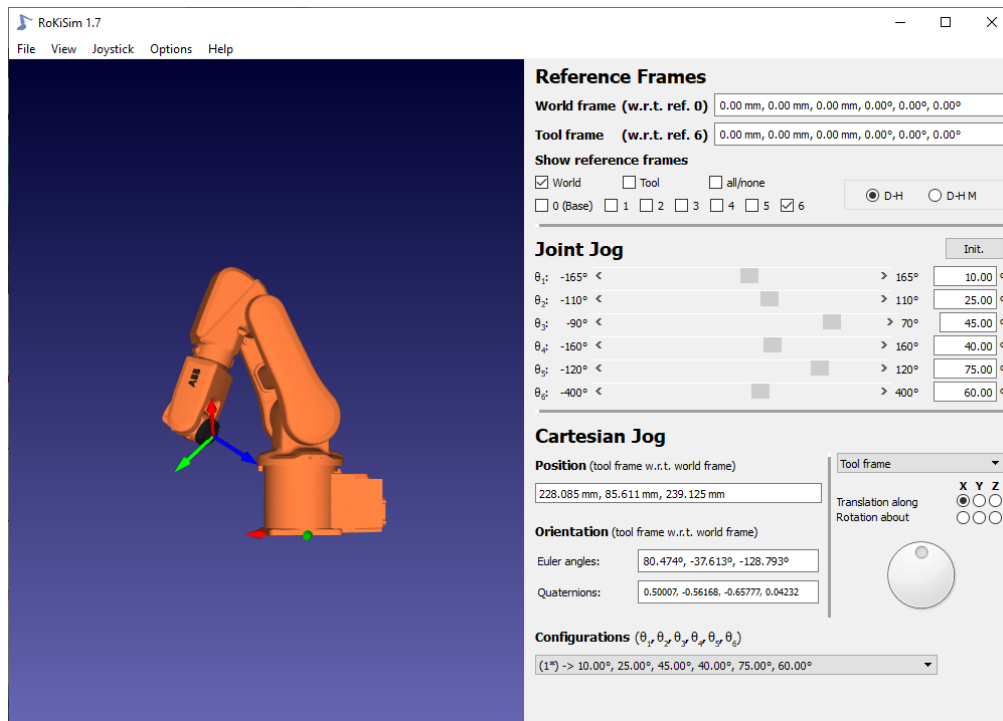
$$\text{Euler}_\phi := 180 + 57.3 \cdot \text{atan} \left[ 2 \cdot \frac{(q_0 \cdot q_1 + q_2 \cdot q_3)}{1 - 2 \cdot [(q_1)^2 + (q_2)^2]} \right] = 112.79$$

sumo 180 para ver el lado +

$$\text{Euler}_\theta := 57.3 \cdot \text{asin} \left[ 2 \cdot (q_0 \cdot q_2 - q_3 \cdot q_1) \right] = 28.026$$

$$\text{Euler}_\psi := 180 + 57.3 \cdot \text{atan} \left[ 2 \cdot \frac{q_0 \cdot q_3 + q_1 \cdot q_2}{1 - 2 \cdot [(q_2)^2 + (q_3)^2]} \right] = 147.738$$

sumo 180 para ver el lado +



Copio el Quaternion:  
0.50007, -0.56168, -0.65777, 0.04232

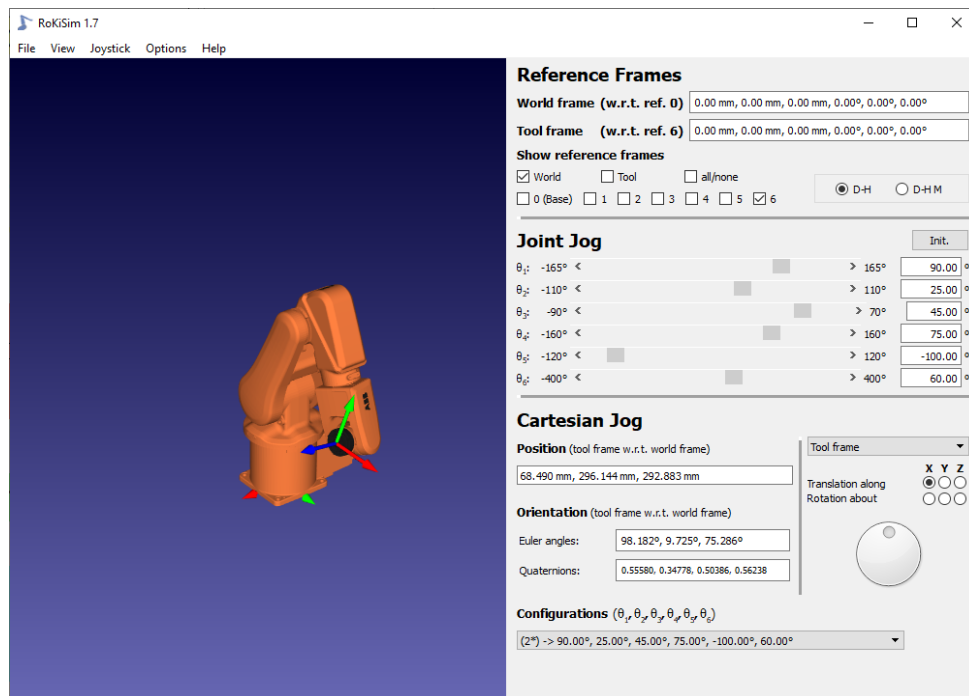
$$q := \begin{pmatrix} 0.50007 \\ -0.56168 \\ -0.65777 \\ 0.04232 \end{pmatrix}$$

$$\text{Euler}_\phi := -180 + 57.3 \cdot \text{atan} \left[ 2 \cdot \frac{(q_0 \cdot q_1 + q_2 \cdot q_3)}{1 - 2 \cdot [(q_1)^2 + (q_2)^2]} \right] = -128.789$$

resto 180 para ver el lado -

$$\text{Euler}_\theta := 57.3 \cdot \text{asin} \left[ 2 \cdot (q_0 \cdot q_2 - q_3 \cdot q_1) \right] = -37.616$$

$$\text{Euler}_\psi := 57.3 \cdot \text{atan} \left[ 2 \cdot \frac{q_0 \cdot q_3 + q_1 \cdot q_2}{1 - 2 \cdot [(q_2)^2 + (q_3)^2]} \right] = 80.48$$



Copio el Quaternion:

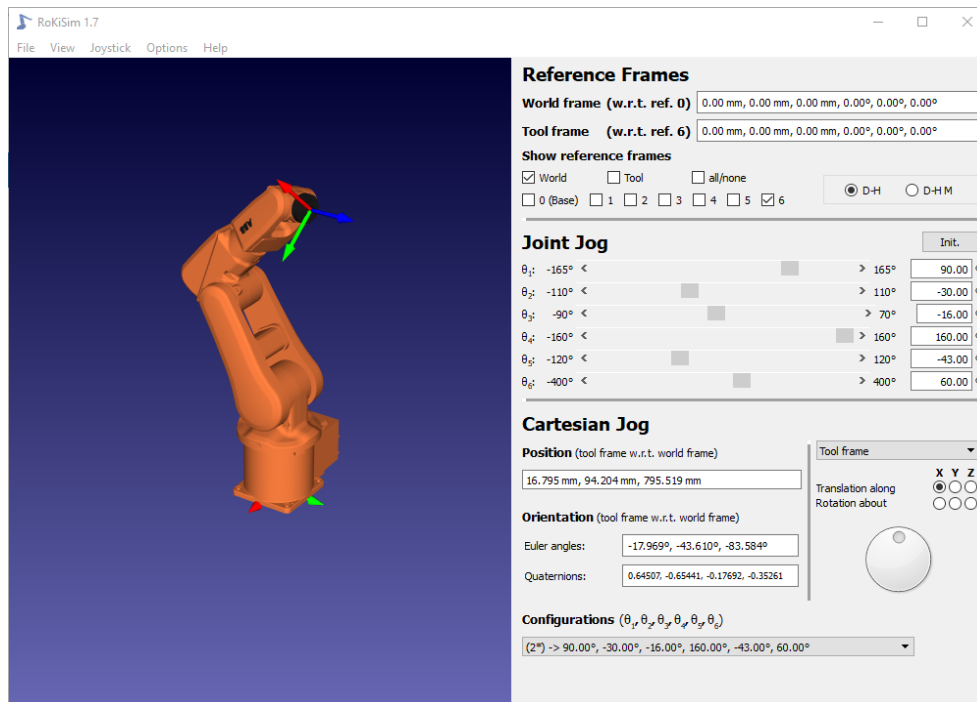
0.55580, 0.34778, 0.50386, 0.56238

$$q := \begin{pmatrix} 0.55580 \\ 0.34778 \\ 0.50386 \\ 0.56238 \end{pmatrix}$$

$$\text{Euler}_{\phi} := 57.3 \cdot \text{atan} \left[ 2 \cdot \frac{(q_0 \cdot q_1 + q_2 \cdot q_3)}{1 - 2 \cdot [(q_1)^2 + (q_2)^2]} \right] = 75.291$$

$$\text{Euler}_{\theta} := 57.3 \cdot \text{asin} \left[ 2 \cdot (q_0 \cdot q_2 - q_3 \cdot q_1) \right] = 9.726$$

$$\text{Euler}_{\psi} := 180 + 57.3 \cdot \text{atan} \left[ 2 \cdot \frac{q_0 \cdot q_3 + q_1 \cdot q_2}{1 - 2 \cdot [(q_2)^2 + (q_3)^2]} \right] = 98.177$$



Copio el Quaternion:

0.64507, -0.65441, -0.17692, -0.35261

$$q := \begin{pmatrix} 0.64507 \\ -0.65441 \\ -0.17692 \\ -0.35261 \end{pmatrix}$$

$$\text{Euler}_{\phi} := 57.3 \cdot \text{atan} \left[ 2 \cdot \frac{(q_0 \cdot q_1 + q_2 \cdot q_3)}{1 - 2 \cdot [(q_1)^2 + (q_2)^2]} \right] = -83.591$$

$$\text{Euler}_{\theta} := 57.3 \cdot \text{asin} \left[ 2 \cdot (q_0 \cdot q_2 - q_3 \cdot q_1) \right] = -43.614$$

$$\text{Euler}_{\psi} := 57.3 \cdot \text{atan} \left[ 2 \cdot \frac{q_0 \cdot q_3 + q_1 \cdot q_2}{1 - 2 \cdot [(q_2)^2 + (q_3)^2]} \right] = -17.97$$