

transforms a coordinate vector from frame {Y} to frame {X}

$${}^X v = {}^X \xi_Y \cdot {}^Y v$$

pronounced ksi

$$= \ominus {}^Y \xi_X$$

pose of frame {Y} relative to frame {X}

$$\xi_Y = \xi_X \oplus {}^X \xi_Y$$

relative motion from frame {X} to frame {Y}