

## Space Vector Angles

## Why

We generalize the notion of angles in the plane to angles in space.

## Definition

The angle (unsigned angle) between  $x \in \mathbb{R}^3$  and  $y \in \mathbb{R}^3$  is the real number

$$\theta = \angle(x, y) = \cos^{-1} \frac{x^{\top} y}{\|x\| \|y\|}$$

