

# Notation

## General

Quantity	Notation	Subscript		Example
		Left	Right	
Scalar	lowercase	n/a	n/a	$a = 4$
Vector	lowercase, bold	frame	from $\rightarrow$ to	${}^{\mathcal{A}}\mathbf{r}_{AB}$
Homogeneous vector	lowercase, bold, tilde	frame	from $\rightarrow$ to	${}^{\mathcal{A}}\tilde{\mathbf{r}}_{AB}$
Matrix	uppercase, bold	n/a	n/a	$\mathbf{A}$
Transformation matrix <sup>1</sup>	uppercase, bold	n/a	to $\leftarrow$ from	$\mathbf{R}_{BA}$

<sup>1</sup> This includes passive rotations, homogeneous transformations, quaternions

## Probability

Property	Notation
Probability	$\mathbb{P}(\cdot)$
Expectation	$\mathbb{E}(\cdot)$
Variance	$\text{Var}(\cdot)$