



## N-DIMENSIONAL SPACE

### Why

#### Definition

An *point* is an element of  $\mathbf{R}^n$ . The *origin* is the tuple of all zeros.

#### 0.1 Notation

We denote the set of real numbers by  $\mathbf{R}$  and we denote the  $n$ -dimensional space by  $\mathbf{R}^n$ .





