

Definition 0.0.1 (measurability).

- Given a state space Ω and a σ -algebra $\mathcal{A} \subseteq 2^\Omega$, the duple $(\Omega, \mathcal{A})$ called a **measurable space**.
- A subset $A \in \Omega$ is said to be $\mathcal{A}$ -measurable if $A \in \mathcal{A}$. We call A an **event**.