

## Contents

0.1	Axioms for measures . . . . .	1
0.1.1	Measures are non-negative . . . . .	1
0.1.2	The measure for the null set is 0. . . . .	1
0.1.3	Disjoint sets are additive . . . . .	1

### 0.1 Axioms for measures

#### 0.1.1 Measures are non-negative

$$\forall E \in \Sigma : \mu(E) \geq 0$$

#### 0.1.2 The measure for the null set is 0.

$$\mu(\emptyset) = 0$$

#### 0.1.3 Disjoint sets are additive

$$\mu(\bigvee_{k=1}^{\infty} E_k) = \sum \mu(E_k)$$

Where all elements  $E_k$  are disjoint. That is, they have no elements in common.