Probability theory: structure (definitions)



Probability theory: mathematics (necessary properties)

Three postulates: $0 \le P(A)$; same for P(B) - P is a *non-negative measure*

$P(A \cup B) = P(A) + P(B)$	– <i>additivity</i> of the measure
	(A and B are <i>disjoint</i> events)
$P(\mathbf{S}) = 1$	– upper limit of the measure

A closed set with a limited finite and additive measure is called

σ-algebra (sigma algebra)