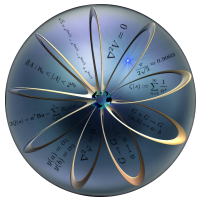

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sigma–ring of sets

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A σ-*ring of sets* is a nonempty collection $\mathcal{S}$ of sets such that

- if $A \in \mathcal{S}$ and $B \in \mathcal{S}$ then $A - B \in \mathcal{S}$ and
- if $A_i \in \mathcal{S}$ for $i = 1, 2 \ldots$, then $\cup_{i=1}^{\infty} A_i \in \mathcal{S}$

A σ-ring is also closed under countable intersections since

$$\cap_{i=1}^{\infty} A_i = A - \cup_{i=1}^{\infty} (A - A_i)$$

where $A = \cup_{i=1}^{\infty} A_i$.

σ-rings are used in measure theory.