

Set-Theoretic Property: *atis*Partition

(*Set-theoretic properties* are those properties that are part of the meta-theory and have been abducted from set theory to be used as a tool to provide solutions concerning the theory. Those solutions may be assigned as values to components or relations of the theory and thereby become part of the theory.)

Partition, \mathcal{P} , =_{df} a family of disjoint *object-sets* of the *general system object-set*, \mathfrak{S}_0 .

$\mathcal{P} =_{df} \{\mathfrak{S}_{0i} \mid \exists i \in \mathcal{I} \forall \mathfrak{S}_{0i} (\mathfrak{S}_{0i} \subset \mathfrak{S}_0 \wedge (i \neq j \supset \mathfrak{S}_{0i} \cap \mathfrak{S}_{0j} = \emptyset))\}$; where \mathcal{I} is the set of positive integers; or

Partition is defined as an **object-partitioning set** is defined as a set of object-sets; such that, there is an index set such that for all object-sets, the object-sets are disjoint.