

Graph-Theoretic Property: *atis* Complete Unilaterally Connected Components Set

(Graph-theoretic properties are those properties that are part of the meta-theory and have been abducted from graph 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.)

Complete unilaterally connected component set, ${}_{\text{CUC}}\mathcal{E}$, =_{df} The set of all unilaterally connected components with respect to a given relation, (x,y) , that does not include branching.

$${}_{\text{CUC}}\mathcal{E}, =_{\text{df}} \mathcal{X} = \{x \mid x \in \mathcal{RCS}_0 \wedge \forall y \in \mathcal{R}[x \neq y \wedge (x,y) \in {}_{uc}E]\}$$

Complete unilaterally connected component set is defined as a set of unilaterally connected pairs.