The Irreducible Spine of a Graph: A Study in Closure

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A subgraph, $I$, is irreducible if every node is closed. If $G$ is undirected and we use a neighborhood closure, then it has a unique, irreducible subgraph called its “spine”. This spine preserves global connectivity. The centers of the graph (w.r.t. distance or betweenness) are contained within the spine.

Keywords: closure, undirected graph, connectivity, betweenness