

Extraconnectivities of augmented cubes

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A set of vertices T in a connected non-complete graph G is called a *restricted vertex-cut of order m* if $G - T$ is disconnected and every component in $G - T$ has at least m vertices. The *restricted vertex connectivity of order m* (also known as the $(m - 1)$ -*extraconnectivity*) is the size of a smallest restricted vertex-cut of order m . Thus a restricted vertex-cut of order 1 is a vertex-cut and the restricted vertex connectivity of order 1 (or 0-extraconnectivity) is the vertex connectivity. In this talk, we discuss the q -extraconnectivity of augmented cubes for small q .

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