A CHARACTERIZATION OF THE CENTERS OF CHORDAL GRAPHS.

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Abstract. A graph is chordal if it does not have any induced cycles with length greater than three. The distance $d(x, y)$ is the length of the shortest path from x to y. The eccentricity of graph is $\epsilon(x) = max\{d(x, y)|y \in V(G)\}$ and its radius and diameter are defined respectively as $Rad(G) = min\{\epsilon(x)|x \in V(G)\}$ and $Diam(G) = max\{\epsilon(x)|x \in V(G)\}$. The subgraph induced by all vertices of G with eccentricity equal to the radius is called the center of G. This paper presents a short and simple characterization of the centers of chordal graphs.

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