ON THE GORENSTEIN PROPERTY OF THE EHRHART RING
OF THE STABLE SET POLYTOPE OF AN H-PERFECT GRAPH

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ABSTRACT. In this paper, we give a criterion of the Gorenstein property of the Ehrhart ring of the stable set polytope of an h-perfect graph: the Ehrhart ring of the stable set polytope of an h-perfect graph G is Gorenstein if and only if (1) sizes of maximal cliques are constant (say n) and (2) (a) $n = 1$, (b) $n = 2$ and there is no odd cycle without chord and length at least 7 or (c) $n \geq 3$ and there is no odd cycle without chord and length at least 5.

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