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**ARBITRARILY VERTEX DECOMPOSABLE TREES  
ARE OF MAXIMUM DEGREE AT MOST SIX**

**Abstract.** A tree  $T$  is arbitrarily vertex decomposable if for any sequence  $\tau$  of positive integers adding up to the order of  $T$  there is a sequence of vertex-disjoint subtrees of  $T$  whose orders are given by  $\tau$ . It is proved that if a tree  $T$  is arbitrarily vertex decomposable, then  $\Delta(T) \leq 6$ .

**Keywords:** tree, vertex decomposition.

**Mathematics Subject Classification:** 05C05, 05C35.