

1146-05-58

Robert E. Jamison and **Henry Martyn Mulder***, hmmulder@ese.eur.nl. *Dyadic representation of graphs.*

A graph G is *dyadic* provided it has a representation $v \rightarrow S_v$ from vertices v of G to subtrees S_v of a host tree T with maximum degree 3 such that (i) v and w are adjacent in G if and only if S_v and S_w share at least three nodes and (ii) each edge of T is used by exactly two representing subtrees. We show that a connected graph is dyadic if and only if it can be constructed from edges and cycles by gluing vertices to vertices and edges to edges. (Received January 05, 2019)