

1146-05-416

**Garth Isaak\*** ([gisaak@lehigh.edu](mailto:gisaak@lehigh.edu)). *Forbidden SEO-Induced Subgraphs.*

Variants on the Hamiltonian path and cycle problems have polynomial algorithms on certain structured graph families. We hope for a nice corresponding structural theorem. A forbidden subgraph theorem: ‘In this class,  $G$  has a Hamiltonian cycle if and only if  $G$  has no induced subgraph from list  $L$ ’ seems to be nonsense. However, something interesting happens if we use instead ‘SEO-induced subgraphs’, restricting to induced subgraphs whose vertex set is the end of a simplicial elimination ordering. We will look in more detail at what this looks like in the class of 2-trees. (Received January 28, 2019)