1077-05-1568 Breeanne Baker* (bab207@lehigh.edu) and Garth Isaak. The k-Fixed-Endpoint Path Partition Problem.

Given a graph G and a set T of k vertices, a k-fixed-endpoint path partition of G with respect to T is a set of vertexdisjoint paths which cover the vertices of G and in which every vertex in T is an endpoint of a path. The k-fixed-endpoint path partition problem is to find the minimum size of such a path partition. In general, this problem is NP-hard; however, solutions are possible for certain graph classes. This talk will focus on highly structured graph classes. (Received September 20, 2011)