1037-05-170 Cedric Bentz, Marie-Christine Costa, Dominique de Werra, Christophe Picouleau, Bernard Ries* (bernard.ries@epfl.ch) and Rico Zenklusen. Blockers and transversals. Preliminary report.

Given an undirected graph G = (V, E), a d-blocker is a subset of edges whose removal decreases the cardinality of a maximum matching by at least d. A d-transversal is a subset of edges which intersects with each maximum matching on at least d edges. We are in particular interested in finding minimum d-blockers and minimum d-transversals. First we will give some basic properties concerning these two notions. Then we present some complexity results and analyze special classes of graphs for which minimum d-blockers and/or minimum d-transversals can be found in polynomial time. (Received February 01, 2008)