

On arrangements of hyperplanes from connected subgraphs

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Abstract. We investigate arrangements of hyperplanes whose normal vectors are given by connected subgraphs of a fixed graph. These include the resonance arrangement and certain ideal subarrangements of Weyl arrangements. We characterize those which are free, simplicial, factored, or supersolvable. In particular, such an arrangement is free if and only if the graph is a cycle, a path, an almost path, or a path with a triangle attached to it.

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