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List H -Coloring a Graph by Removing Few Vertices

In the deletion version of the list homomorphism problem, we are given graphs G and H , a list $L(v) \subseteq V(H)$ for each vertex $v \in V(G)$, and an integer k . The task is to decide whether there exists a set $W \subseteq V(G)$ of size at most k such that there is a homomorphism from $G \setminus W$ to H respecting the lists. We show that this problem is fixed-parameter tractable parameterized by k and $|H|$. This is joint work with Rajesh Chitnis and Daniel Marx.