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An absence of leaves in regularity

Let G be a graph, and $I(G)$ the associated edge ideal. It is not difficult to show that there is a vertex v such that $\operatorname{reg} I(G) \leq \operatorname{reg} I(G \setminus N[v]) + 1$. In recent joint work with Tài Hà, we have shown that this vertex v can be chosen to avoid vertices of degree 1 ("leaves"). As a corollary, we get a new packing-type upper bound for the regularity of an edge ideal of a graph.