Distinguishing index of the graphs with $\delta \geqslant \frac{\Delta}{2}$.

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Let G be a connected, finite or infinite, graph. An edge-coloring $\phi : E(G) \to \{1, 2, ..., r\}$ of a graph G is said to be *asymmetric* if no nontrivial automorphism of G preserves colors of the edges.

The minimal possible r is called the *distinguishing index* of G and denoted by $D'(G)$.

In [1] F. Lehner, M. Pilśniak, M. Stawiski proved that that for connected regular graphs other than K_2, $D'(G) \leqslant 3$.

Here we extend this result to a much larger class of connected graphs satisfying the condition $\delta \geqslant \frac{\Delta}{2}$.

References

[1] F. Lehner, M. Pilśniak, M. Stawiski, A bound for the distinguishing index of regular graphs, *European J. Combin.* 89 (2020) 103145