CONSECUTIVELY COLOURABLE ORIENTATIONS OF GRAPHS

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An oriented graph is consecutively colourable if it admits a proper arc colouring in which for each vertex the set of colours of in-arcs and the set of colours of out-arcs that are incident with the vertex are both intervals of integers. We present connections between the existence of consecutively colourable orientation of a graph and some other properties of this graph. Next, we apply a classical approach and a new special trail technique to confirm the existence of consecutively colourable orientations of graphs for a few classes of graphs.

References

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