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ON A LIST (k, l)-COLORING OF INCIDENTORS IN MULTIGRAPHS OF EVEN DEGREE FOR SOME VALUES OF k AND l

A. V. Pyatkin

The problem of a list (k, l)-coloring of incidentors of a directed multigraph without loops is studied in the case where the lists of admissible colors for incidentors of each arc are integer intervals. According to a known conjecture, if the lengths of these interval are at least $2\Delta + 2k - l - 1$ for every arc, where Δ is the maximum degree of the multigraph, then there exists a list (k, l)-coloring of incidentors. We prove this conjecture for multigraphs of even maximum degree Δ with the following parameters:

- $l \geq k + \Delta/2$;
- $l < k + \Delta/2$ and k or l is odd;
- $l < k + \Delta/2$ and $k = 0$ or $l - k = 2$.

Keywords: list coloring, incidentors, (k, l)-coloring.

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Artem Valer'evich Pyatkin, Dr. Phys.-Math. Sci., Sobolev Institute of Mathematics; Novosibirsk State University, Novosibirsk, 630090 Russia, e-mail: artem@math.nsc.ru .

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