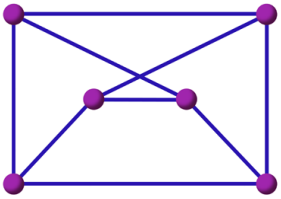

SEMINARIUM
MATEMATYKA DYSKRETNA

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INFINITE GRAPHS WITH FINITE 2-DISTINGUISHING COST

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A graph G is said to be 2-distinguishable if there is a labeling of the vertices with two labels such that only the trivial automorphism preserves the labels. Call the minimum size of a label class in such a labeling of G the cost of 2-distinguishing G.

It is shown that the connected, locally finite, infinite graphs with finite 2-distinguishing cost are exactly the graphs with countable automorphism group. Further, that in such graphs the cost is less than three times the size of a smallest determining set.

For graphs of linear growth a considerably sharper bound is possible.