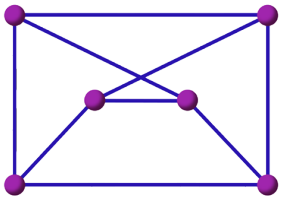

SEMINARIUM
MATEMATYKA DYSKRETNA

wtorek, 28 marca 2017 r., godz. 12:30, s. 304 A3-A4

DISTINGUISHING INFINITE SUBCUBIC GRAPHS

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We investigate the *distinguishing index* $D'(G)$ of a graph G as the least number d such that G has an edge colouring with d colours that is only preserved by the trivial automorphism. This is an analog to the notion of the distinguishing number $D(G)$ of a graph G, which is defined for colourings of vertices.

Let G be an infinite, connected subcubic graph. We prove that $D'(G) \leqslant 2$.

For vertex colourings, we show that $D(G) \leqslant \Delta(G) - 1$ for every infinite, connected graph G with $\Delta(G) \geqslant 3$ and $m(G) \geqslant 3$, i.e., when every nontrivial automorphism of G moves at least three vertices.