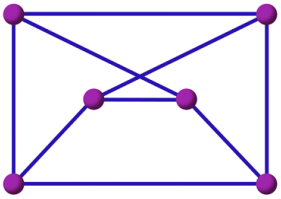

SEMINARIUM
MATEMATYKA DYSKRETNA

wtorek, 27 marca 2012 r. godz. 12.45, s. 304 A3/A4

DISTINGUISHING INFINITE GRAPHS

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The distinguishing number $D(G)$ of a graph G is the least cardinal number d such that G has a labeling with d labels that is only preserved by the trivial automorphism. Tom Tucker conjectured that the distinguishing number $D(G)$ of infinite, locally finite, connected graphs G is two if every nontrivial automorphism of G moves infinitely many vertices. This "Infinite Motion Conjecture" is the main topic of the talk.

We discuss its origin in the class of finite graphs, and present many cases where the conjecture holds, in particular a class of graphs of small superlinear growth and uncountable group. Then we generalize it to uncountable graphs and prove certain instances where the general conjecture is true.