SEMINARIUM
MATEMATYKA DYSKRETNA

wtorek, 13 października 2015 r. godz. 12.45, s. 304 A3-A4

LIST STAR EDGE COLORING OF SUBCUBIC GRAPHS

André Raspaud
LaBRI, University of Bordeaux, France
joint work with Samia Kerdjoudj and Alexandr Kostochka

A *star edge coloring* of a graph G is a proper edge coloring such that every 2-colored connected subgraph of G is a path of length at most 3. For a graph G, let the *list star chromatic index* of G, $ch'_s(G)$, be the minimum k such that for any k-uniform list assignment L for the set of edges, G has a star edge coloring from L.

Dvořák, Mohar and Šámal [1] asked whether the list star chromatic index of every subcubic graph is at most 7. We will give a partial answer to this question in this talk by proving that it is at most 8. We will also give some bounds for the list star chromatic index of sparse graphs.

Literatura

[1] Z. Dvořák, B. Mohar, and R. Šámal. Star chromatic index, J Graph Theory 72(2013), 313–326.