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Star edge-coloring of subcubic graphs

A *star edge-coloring* of a graph is a proper edge-coloring without bichromatic paths and cycles of length four. In 2013 Dvořák, Mohar, and Šámal showed that 7 colors are enough for a star edge-coloring of subcubic graphs. They suggested to study a list version of this problem and asked whether 7 colors are enough also for list star edge-coloring of subcubic graphs.

In this talk, we discuss results regarding subcubic graphs and prove that the list star chromatic index of such graphs is at most 7, answering the question above.