

Lecture 1.

Maximum Independent Set Problem (MISP)

The first lecture will be devoted to the classical NP-hard problem on the maximum independent set of vertices in an undirected graph (MISP). As a review, the justification of computational complexity and practical applications of this problem will be observed. As is known, some classes of graphs are polynomial solvable with respect to the MISP. The lecture will provide an overview of these classes as well as corresponding algorithms. Finally, there are adapted exact algorithms for solving the MISP, which will also be observed in frame of lecture.