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Title

Ordering Problems

Abstract

Manifold combinatorial optimization problems are concerned with the determination of an optimal ordering of objects subject to various types of constraints and objectives. In particular, the objective function has a big influence on the difficulty of an ordering problem and on suitable optimization algorithms. Examples of ordering problems are the traveling salesman problem, the linear ordering problem, the linear arrangement problem, the bandwidth problem, the target visitation problem and the coupled task scheduling problem. In this lecture we give an introduction into ordering problems, discuss some of them in more detail and report about general and problem-specific approaches for finding optimum solutions. Computational results will be reported.