

The Euclidean group traveling salesman problem

Rene Sitters

MPI Informatik, Saarbruecken

22/02/2006

EIDMA SEMINAR COMBINATORIAL THEORY

In this optimization problem we are given a set of points P in the plane and a set of m connected regions, each containing at least one point from P . We want to find a tour of minimum length that visits at least one point in each region. I will present simple approximation algorithm for several variants of this problem, e.g., a $(9.1\alpha + 1)$ -approximation algorithm for the case when the regions are disjoint α -fat objects with possibly varying size.