

# Oberseminar Theoretische Informatik

Wintersemester 2007/2008

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## Reoptimization of traveling salesman tours

Mo, 11.02.2008 um 14 Uhr (c.t.) im SR 3319 (Ernst-Abbe-Platz 2, 3. Stock).

Given an *optimum* tour of a weighted graph  $G$ , we want to determine if one can maintain a good tour when  $G$  is subject to minor modifications. We study the case where weights of single edges are increased or decreased. We show that for these modifications an optimum tour of  $G$  is not helpful for finding a tour of the modified graph. In the metric case, we are able to find a  $4/3$ -approximation, improving the bound given by Christofides' algorithm.

Internetseite der Veranstaltung:

<http://theinf1.informatik.uni-jena.de/teaching/ws0708/oberseminar-ws0708>