

Institut für Optimierung und Diskrete Mathematik

Vortrag im Seminar Optimierung und Diskrete Mathematik

Neuer Termin **10.8. 2015**, 15:15

Seminarraum C208, Steyrergasse 30, 2. Stock

## On the $k$ -opt neighborhood for TSP

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One of the most popular local search heuristics for the Travelling Salesman Problem (TSP) is centered around the  $k$ -opt neighborhood;  $k$ -opt tries to improve a (suboptimal) tour by removing  $k$  edges and by reconnecting the resulting pieces into a new tour through the insertion of  $k$  new edges.

In the talk, I will concentrate on the problem whether a given tour is a local optimum for  $k$ -opt (for some fixed  $k$ ), and I will present a fine-grained complexity analysis of this problem.

Eranda Dragoti-Çela und Bettina Klinz