

Institut für Diskrete Mathematik

Vortrag im Seminar Kombinatorik und Optimierung

21.6.2016, 14:15

Seminarraum AE06, Steyrergasse 30, Parterre

Bottleneck and linear assignment problems in geometric graphs

ARNUR NIGMETOV

(Institut für Geometrie, TU Graz)

The talk will be about using geometric data structures to solve the bottleneck and linear assignment problems in geometric graphs. The motivation is computational topology, where these problems appear for persistence diagrams, which are subsets of the plane, so we are going to deal with bipartite graphs embedded in \mathbb{R}^2 with edge cost being some power of the distance between the vertices. The main underlying structure in both problems will be k-d tree (with some modifications for the linear assignment problem).

Mihyun Kang, Bettina Klinz