ALPEN-ADRIA UNIVERSITÄT KLAGENFURT

INVITATION TO THE DOCTORAL SEMINAR

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"Building upper bounds for graph partitioning problems"

https://classroom.aau.at/w/dnes-ezd-k9g

Wednesday, 18 November 2020

10:00 a.m.

Abstract

The graph partitioning problem asks to find a partition of the vertices of a graph that has the minimum total weight for all the edges cut by the partitions. Is is an NP-hard problem and it is computationally expensive to solve the problem by heuristics when the the graph size increases. In this talk we present ways to obtain tight lower bounds by forming the semidefinite programming (SDP) relaxations for the graph partitioning problem and then build feasible solutions based on the SDP solution. First numerical experiments demonstrate that we find high quality bounds with reasonable computational costs.

Angelika Wiegele and the Department of Mathematics look forward to seeing you at the talk!