INVITATION TO A
GUEST LECTURE

Jeferson Zapata, M.Sc.
ISTA Wien
“Degeneracy in Semidefinite Programming”

📍 N.0.15. 🗓 Thursday, 17 November 2022 🕒 10:00 a.m.

Abstract
Conic linear programs can be classified in four mutually exclusive feasibility types: strictly-feasible, weakly-feasible, weakly-infeasible, and strongly-infeasible. On the practical side, there are implementations using interior point methods (IPMs) or Newton-type algorithms that can often provide the floating-point approximation of a solution but the lack of feasible interior points can cause theoretical and numerical difficulties. Some IPMs are able to obtain a certificate of infeasibility if the problem is strongly infeasible, but the situation is less clear in the presence of so-called weak feasibility/infeasibility. In this talk, we discuss some aspects of degenerate SDPs and some approaches to tackle them.

Daniel Brosch and the Department of Mathematics look forward to seeing you at the talk!

www.math.aau.at