



universität
wien

Fakultät für Mathematik
Oskar-Morgenstern-Platz 1
A-1090 Vienna
Austria

<https://owos.univie.ac.at>

ONE WORLD OPTIMIZATION SEMINAR

May 17th 2021 @ 15:30 CEST (Central European Summer Time)

MARCO ANTONIO LÓPEZ CERDÁ

(University of Alicante)

Properties of Inequality Systems and Their Influence in Convex Optimization

Abstract. In this seminar, different optimality conditions are presented for the convex optimization problem with an arbitrary number of constraints. One possible approach is to replace the set of constraints by a single constraint involving the supremum function, and to appeal to different characterizations of its subdifferential. With a view to this goal, we extend to infinite convex systems two constraint qualifications that are crucial in semi-infinite linear programming. The first one, called the Farkas-Minkowski property, is global in nature, while the other one is a local property, which is known as the local Farkas-Minkowski property. Four different KKT-type optimality conditions are then deduced, either exact or asymptotic, under progressively weaker constraint qualifications.

The link of the zoom-room of the meeting and the corresponding password will be announced the day before the talk on the mailing list of the seminar, to which one can subscribe on <https://owos.univie.ac.at>.