

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

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ONE WORLD OPTIMIZATION SEMINAR

June 7th 2021 @ 15:30 CEST (Central European Summer Time)

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On the Role of Interiority Notions in Convex Analysis and Optimization

Abstract. It is well known that in finite dimensions, in order to get the formulae for the subdifferentials and conjugates of functions obtained by operations which preserve convexity or for getting strong duality results, the sufficient conditions are expressed by using the relative interiors of the domains of the involved functions.

In the infinitely dimensional case, several interiority notions are used: the algebraic (relative) interior, the quasi (relative) interior and mixtures of these. It is the aim of our talk to discuss the advantages and limitations of these notions.

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