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

https://owos.univie.ac.at

ONE WORLD OPTIMIZATION SEMINAR

March 8th 2021 @ 15:30 CET (Central European Time)

LIEVEN VANDENBERGHE

(UCLA)

Bregman Proximal Methods for Semidefinite Optimization

Abstract. Generalized proximal methods based on Bregman distances offer the possibility of matching the distance to the structure in the problem, with the goal of reducing the complexity per iteration. In semidefinite optimization, the use of a generalized distance can allow us to avoid expensive eigendecompositions, needed in standard proximal methods for Euclidean projections on the positive semidefinite cone. We discuss applications to sparse semidefinite optimization, and to other types of structure that are common in control and signal processing, such as Toeplitz structure.

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.