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ONE WORLD OPTIMIZATION SEMINAR

November 22th 2021 @ 15:30 CET (Central European Time)

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An Inertial Non-smooth Non-convex Bregman Minimization Framework

Abstract. Lipschitz continuity of the gradient mapping of a continuously differentiable function plays a crucial role in designing various optimization algorithms. However, many functions arising in practical applications such as low rank matrix factorization or deep neural network problems do not have a Lipschitz continuous gradient. This led to the development of a generalized notion known as the L-smad property, which is based on generalized proximity measures called Bregman distances. We propose the MAP property, which generalizes the L-smad property and is also valid for a large class of nonconvex nonsmooth composite problems. Based on the proposed MAP property, we develop a globally convergent algorithm called Model BPG and an inertial variant, that unifies several existing algorithms.

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.