

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

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ONE WORLD OPTIMIZATION SEMINAR

March 22nd2021 @ 15:30 CET (Central European Time)

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Scaling Optimal Transport for High Dimensional Learning

Abstract. Optimal transport (OT) has recently gained lot of interest in machine learning. It is a natural tool to compare in a geometrically faithful way probability distributions. It finds applications in both supervised learning (using geometric loss functions) and unsupervised learning (to perform generative model fitting). OT is however plagued by the curse of dimensionality, since it might require a number of samples which grows exponentially with the dimension. In this talk, I will review entropic regularization methods which define geometric loss functions approximating OT with a better sample complexity.

More information and references can be found on the website of our book "Computational Optimal Transport" https://optimaltransport.github.io/.

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>.