Einladung zum

Würzburger Mathematischen Kolloquium

Julius-Maximilians-Universität Würzburg • Fakultät für Mathematik und Informatik

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Universität Braunschweig

Analysis and Algorithms for Optimal Transport

Mittwoch, der 20. Nov. 2019 • 16:15 Uhr

Raum SE 40, Mathematik Ost, Emil-Fischer-Str. 40, Campus Hubland-Nord

Inhaltsangabe:

How to move mass or goods from where they are to designated places in the most efficient way? This question was posed in geometrical terms by Gaspard Monge in the 18th century already. In the middle of the 20th century Leonid reformulated to problem in the language of measure theory and developed a solution theory (which actually earned him the Nobel prize in economics in 1975). In recent days there have been an increasing interest in the mathematics of optimal transport and computational tools have been developed which helped to make optimal transport applicable in fields like mathematical imaging, machine learning or inverse problems.

In this talk I will introduce various formulations of optimal transport problems (involving, e.g. dynamics of partial differential equations, minimization problems with static partial differential equations as constraints, linear programming, or matrix scaling). I will shortly speak about the analysis of the problems and then focus on the computational problem of developing practical algorithms.



https://www.mathematik.uni-wuerzburg.de/de/aktuelles/kolloquium/

