

Einladung

Würzburger Mathematisches Kolloquium

Julius-Maximilians-Universität Würzburg • Institut für Mathematik

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Universität Augsburg

Optimal Transport on Metric Graphs

Dienstag, 30. Januar 2024 • 14:15 Uhr

Seminarraum SE41 • Forschungsbau (Emil-Fischer-Straße 41, 97074 Würzburg)

Der Vortrag wird auch Zoom-Meeting übertragen: go.uni-wue.de/ifmcolloquium-zoom

Abstract. The theory of optimal transport goes back to the pioneering works of Gaspard Monge in 1781 and Léon Kantorovich in 1942. In 2000, Benamou and Brenier introduced a dynamic formulation of Kantorovich's problem which allows for great flexibility and sparked many extensions of the original formulation. This includes non-linear mobilities, modelling, for example, exclusion effects, reaction term that allow for a change of mass along the transport or the introduction of non-one-homogeneous action functionals. After reviewing some of these results, we will present a recent extension to metric graphs and show the well-posedness in this setting. In addition, we will briefly discuss the general connection between optimal transport and gradient flows on the space of probability measures and present some examples in our graph setting.

