Mass transport via flows of control-affine systems

Tuesday, 23 April 2024 09:40 (30 minutes)

We study the controllability of the continuity equation where the dynamics follows a control-affine system without drift. Under suitable regularity conditions, the controllability of the system is a sufficient condition for achieving controllability of the continuity equation. Moreover, we show the existence of controls such that the flow of the control system is the optimal transport map, for the 2-Wasserstein distance, between two given probability measures.

Presenter: CAPONIGRO, Marco (Università degli Studi di Roma Tor Vergata)