Optimal Transportation for Practical Geometric Problems

Optimal transportation (OT) has gained considerable popularity as a tool for relating signals defined over geometric domains. Despite recent progress developing generic machinery for understanding and optimizing OT problems, considerable effort is still required to transition OT from a theoretical challenge to a practical tool in the computer graphics, geometry processing, and machine learning toolboxes. To this end, I will describe several efforts to develop efficient, resilient OT-based algorithms tailored to these application areas, including extensions to surface matching, semi-supervised learning, and image processing.

The lecture will be held on Wednesday, 02.03.2016, at 10:30, Taub 401