MISC SLIDES

ON THE COMPLEXITY OF ENTOPY REGULARIZED GROMOV WASSERSTEIN

▸ [Hard] Matching rows of similarity matrices usually becomes a quadratic assignment problem (Loiola et al., 2007), which is NP-hard.

▸ Relaxed (~Kantorovich) version (GW) is still non-convex

▸ [Peyre et al.]:

  ▸ For certain class of losses, can compute L (C, C') (x) T in O(n^3)

  ▸ Convergence almost (but not completely) guaranteed in theory, observed in practice

  ▸ For L=L_2, equal to softassign procrustes, convergence proof by Rangarajan [only ensures convergence of the functional values (not of the iterates), and not for general C]