

## **Barycenters for the Hellinger-Kantorovich distance**

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The Hellinger--Kantorovich metric is an 'unbalanced' generalization of the Wasserstein distance, allowing the comparison of non-negative measures of arbitrary mass.

The Wasserstein barycenter is a geometrically intuitive way to form an average of probability measures. In this talk we study the barycenter of the Hellinger--Kantorovich metric, with a focus on the barycenter between (many) Dirac measures. We find that it differs substantially from the Wasserstein barycenter by exhibiting a local clustering behaviour that depends on the length scale of the input measures.