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How far apart can centroids be?

The orthogonal projection of the centroid (barycenter, center of mass) of a convex body K onto a hyperplane H, and the centroid of projection of K onto H coincide if K is centrally-symmetric. In general, this is not the case for non-symmetric convex bodies. In this talk, we investigate how far apart these points can be with respect to the width in the direction of the segment connecting them. The optimizers are described as well. The talk is based on the joint work with K. Tatarko and V. Yaskin (https://arxiv.org/abs/2212.14456).