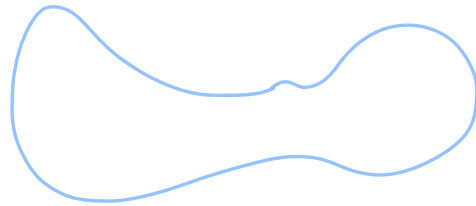
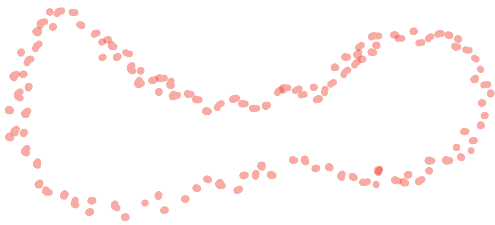
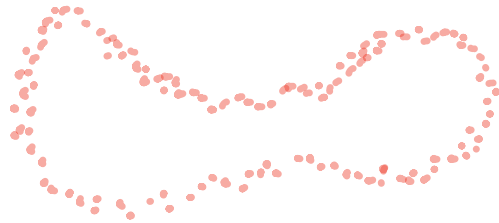
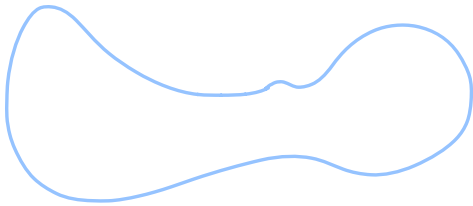
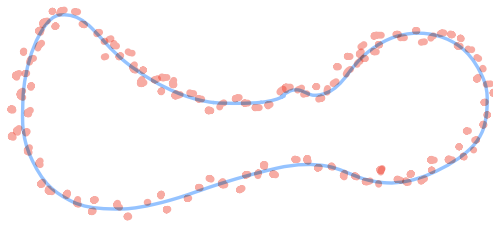


The Hausdorff distance

If X and Y are two subsets of the same metric space, then the Hausdorff distance between them is

$$d_H(X, Y) = \inf \left\{ \varepsilon > 0 \mid X \subseteq Y^\varepsilon \text{ and } Y \subseteq X^\varepsilon \right\}$$



The Gromov-Hausdorff distance

If X and Y are two metric spaces, then the Gromov-Hausdorff distance between them is

$$d_{GH}(X, Y) = \inf_{\substack{\text{isometric embeddings} \\ X \hookrightarrow Z, Y \hookrightarrow Z}} \{d_H^Z(X, Y)\}$$

