Chapter 1

Levy's family and observable diameters

In this section, we will explore how the results from Hayden's concentration of measure theorem can be understood in terms of observable diameters from Gromov's perspective and what properties it reveals for entropy functions.

1.1 Observable diameters

Recall from previous sections, an arbitrary 1-Lipschitz function $f : S^n \to \mathbb{R}$ concentrates near a single value $a_0 \in \mathbb{R}$ as strongly as the distance function does.