

Macroscopic scalar curvature and local collapsing

After introducing the notion of macroscopic scalar curvature, we will present the following result. Consider a Riemannian metric on a closed manifold admitting a hyperbolic metric. Suppose its macroscopic scalar curvature is greater or equal to the one of the hyperbolic metric. Then its volume is bounded away from zero. The argument relies on collapsing techniques and volume localization in metric geometry.