

Singular Weyl's law with Ricci curvature bounded below

Thursday, 15 June 2023 15:50 (1 hour)

We discuss the asymptotic behavior of eigenvalues of the Laplacian on a compact finite dimensional metric measure space with Ricci curvature bounded below, so-called an RCD space. Ambrosio and Tewodrose with me gave a necessary and sufficient condition for the validity of the standard Weyl's law in terms of the size of the regular set. The main purpose of this talk is to provide examples of compact finite dimensional RCD spaces whose asymptotic behaviors can be written by the size of the singular set. In the process of the construction, we can see subRiemannian pictures.

This is a joint work with Xianzhe Dai (UC Santa Barbara), Jiayin Pan (UC Santa Cruz) and Guofang Wei (UC Santa Barbara).

Presenter: HONDA, Shouhei (Tohoku University)