CHEEGER'S INEQUALITY IN SUB-RIEMANNIAN GEOMETRY

MARTIJN KLUITENBERG

We explore extending the classical Cheeger inequality to sub-Riemannian manifolds, which are manifolds in which shortest paths can only take velocities confined to a sub-bundle of the tangent bundle. During the talk, I will discuss the basis properties of sub-Riemannian structures, as well as the key geometric and analytic concepts used in the proof of Cheeger's inequality. Based on [arXiv:2312.13058].