## Cheeger's inequality in sub-Riemannian geometry

Martijn Kluitenberg

University of Groningen

November 18, 2024

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 subbundle 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.