

# Cheeger's inequality in sub-Riemannian geometry

**Martijn Kluitenberg**  
**(Groningen)**

**Wednesday, October 9, 2024**  
**16:00-17:00h on campus in M.G.004**  
**Analysis & Geometry Seminar, Antwerpen**

We explore extending the classical Cheeger inequality to sub-Riemannian manifolds, in which shortest paths can only take velocities confined to a subset of the tangent bundle. During the talk, I will discuss the basic properties of sub-Riemannian structures and the key geometric and analytic concepts used in the proof of Cheeger's inequality.