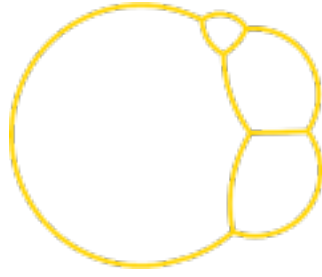Contribution ID: **105**   Type: **not specified**

Optimal transport and quantitative geometric inequalities

Thursday, 23 June 2022 15:50 (50 minutes)

The goal of the talk is to discuss a quantitative version of the Levy-Gromov isoperimetric inequality (joint with Cavalletti and Maggi) as well as a quantitative form of Obata's rigidity theorem (joint with Cavalletti and Semola). Given a closed Riemannian manifold with strictly positive Ricci tensor, one estimates the measure of the symmetric difference of a set with a metric ball with the deficit in the Levy-Gromov inequality. The results are obtained via a quantitative analysis based on the localisation method via L^1-optimal transport.

Presenter: MONDINO, Andrea (University of Oxford)