CHRISTIAN KETTERER, University of Toronto
Glued spaces and lower curvature bounds

First I will survey some classical theorems about glued spaces and lower curvature bounds for Riemannian manifolds. Then I will present a recent result together with Vitali Kapovitch and Karl-Theodor Sturm showing that in the class of Alexandrov spaces equipped with a semi-concave weight the Riemannian curvature-dimension condition (RCD) is preserved under gluing constructions with optimal lower curvature bounds. The RCD condition, a synthetic notion of Ricci curvature bounded from below, is introduced by means of optimal transport.