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Ryan Alvarado* (rjalvarado@amherst.edu). *Another look at the Sobolev embedding theorem in metric-measure spaces.*

Historically, the Sobolev embedding theorem on domains has played a key role in establishing many fundamental results in the area of analysis and it is well known that the geometry of the underlying domain is intimately linked to the availability of these embeddings. In fact, certain geometrical characterizations of domains which support Sobolev embeddings have been obtained in the Euclidean setting. In this talk, we will revisit these embedding theorems in the more general context of metric-measure spaces and discuss some recent work which identifies a measure theoretic condition that is both necessary and sufficient to ensure their veracity. (Received August 17, 2021)