Lusin N condition Tomáš Roskovec University of South Bohemia in České Budějovice

Lusin N condition is the property of mapping, guaranteeing that the preimage of the set of zero measure is also of zero measure. Such a condition is interesting from the perspective of engineering models for the preservation of matter and for mathematics as the property is bound to the Area formula, the Sard theorem, or the connection between the Jacobian and the distributional Jacobian.

In the lecture, we focus on establishing validity and providing counterexamples for classes of Sobolev mappings and homeomorphisms. Refinements provided by the lecturer may be mentioned. The talk is based on the classical results, especially on the papers of Jan Malý.