

M8 Geometric Analysis part 2

Organiser: Changyu Guo, *University of Jyväskylä*

1. Definitions of BLD-mappings

Rami Luisto, *University of Helsinki*

In this talk we give a short introduction to the world of BLD-mappings. Mappings of Bounded Length Distortion were first defined by Martio and Väisälä in 1988 as a subclass of quasiregular mappings and BLD-mappings have shown to be useful in the study of quasiregular analysis ever since. We will give a few equivalent definitions for BLD-mappings and prove some basic theorems about their structure and behaviour.

2. Characterizations of generalized John domains via metric duality.

Debanjan Nandi, *University of Jyväskylä*

Using the metric duality theory developed by Vaisala, we characterize generalized John domains in terms of higher dimensional homological bounded turning for its complement.

2. On 1-quasiregular mappings between Riemannian manifolds

Changyu Guo, *University of Jyväskylä*

We prove that all four different definitions of 1-quasiregular mappings between Riemannian manifolds are equivalent. Moreover, we will also discuss the possible cases in the setting of subRiemannian manifolds.

4. The branch set of a quasiregular mapping in metric spaces

Marshall Williams, *Kansas State University*

We generalize the Bonk-Heinonen theorem to general metric spaces.