

Marianna Csornyei
Math Colloquium
Monday, November 9, 2009

Title: "Structure of null sets, differentiability of Lipschitz functions, and other problems in geometric measure theory"

Abstract:

Our main goal in this talk is to describe non-differentiability sets of Lipschitz functions on \mathbb{R}^n , and to understand the phenomena that occur because of behaviour of Lipschitz functions around the points of null sets.

This will lead us to the notion of tangent fields to null sets, and provide a new understanding of the structure of sets of small measure. This is joint work with G. Alberti and D. Preiss.