THE FIELDS INSTITUTE

ABSTRACTS 1.2

FOR RESEARCH IN MATHEMATICAL SCIENCES

BERND KIRCHEIM Max-Planck Institute

Nikodym sets and optimal transport maps

The existence of optimal transport maps in the measure theoretical approach to the Monge-Kantorovich transport problem is in a crucial way linked to (absolute) continuity of the conditional measures along transport rays. We discuss the impact of the dimension of the ambient space on this continuity property.