

Gradient higher integrability of parabolic double-phase equations

LAURI SÄRKIÖ

Aalto University, Finland

Abstract

Elliptic double-phase problems have been studied extensively in the last decade since a series of results by Mingione and others. Recently several regularity results have been obtained also for parabolic double-phase equations, yet many questions remain unsolved. In this talk, we focus on gradient higher integrability for parabolic double phase equations, showing that solutions belong to a slightly higher Sobolev class than assumed a priori. The talk is based on joint work with Wontae Kim, Juha Kinnunen and Kristian Moring.