

1133-35-353

Maria Alessandra Ragusa* (maragusa@dmi.unict.it), Department of Mathematics and Informatics, University of Catania, Cittadella universitaria, Viale A. Doria No.6, 95125 Catania, Italy. *New regularity properties of minimizers of some variational integrals*

We present some problems studied in cooperation with Professor Atsushi Tachikawa. We treat regularity results for minimizers

$$u(x) : \Omega \subset \mathbb{R}^m \rightarrow \mathbb{R}^n$$

of quadratic and non quadratic growth functional

$$\int_{\Omega} A(x, u, Du) dx.$$

About the dependence on the variable x , it is assumed only that $A(\cdot, u, p)$ is in the vanishing mean oscillation class, as a function of x . Namely, the continuity of $A(x, u, p)$ with respect to x is not assumed. This is a placeholder abstract. To be changed in a couple of days (Received August 01, 2017)