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BMO Regularity for One-Dimensional Minimizers of some Lagrange Problems

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Abstract: We extend our results about a class of non-regular Lagrange problems of Calculus of Variations showing that the derivative of minimizers are in BMO. For this class we give also some results of optimality relative to the Tonelli set, of the type recently given by Ball-Mizel, by using results of Harmonic Analysis.

Keywords: Calculus of Variations, One-dimensional problems, Reverse Jensen Inequalities, Tonelli set, BMO, Orlicz Spaces

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