

On BV -homeomorphism

Luigi D'Onofrio*

* Parthenope University, Italy
E-mail: luigi.donofrio@uniparthenope.it

In this talk we present the rectifiability of the graph of a bounded variation homeomorphism f in the plane and relations between gradients of f and its inverses, see [1]. Further, we show an example of a bounded variation homeomorphism f in the plane which satisfies the Lusin property and strict positivity of Jacobian of both itself and its inverse is Sobolev.

REFERENCES

- [1] D'Onofrio, Luigi; Maly, Jan; Sbordone, Carlo; Schiattarella, Roberta, On BV homeomorphisms, *Journal of Convex Analysis*, **28**(2021), 549-568.