

# THOUGHTS ON DENSITY POINTS

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ABSTRACT. In the beginning of the last century Henri Lebesgue proved the Density Theorem named after him. It states that almost every point  $p$  of a measurable set  $S$  is a density point of it, meaning that as one considers ever smaller neighbourhoods of  $p$  the relative measure of  $S$  within the neighbourhood approaches 1.

A brief overview over some possible generalisations of this result will be given. This is partly joint work with Sandra Müller, Philipp Schlicht and David Schrittesser and partly continues work of Wiesława Poreda, Elżbieta Wagner-Bojakowska and Władysław Wilczyński.

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