

## ON SUBQUADRATIC FUNCTIONS

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ABSTRACT. Related to the theory of convex and subadditive functions (c.f., e.g., [7]), we present some results on subquadratic mappings, that is, solutions of the functional inequality

$$f(x + y) + f(x - y) \leq 2f(x) + 2f(y)$$

for real valued functions defined on a topological group (c.f. [5]). Especially, we study the lower and upper hulls of such functions, we prove Bernstein–Doetsch-type theorems for them and we investigate the connection between our concept and another possible notion of subquadraticity considered by several authors recently (c.f. [1], [2], [3], [4] and [6]).

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